

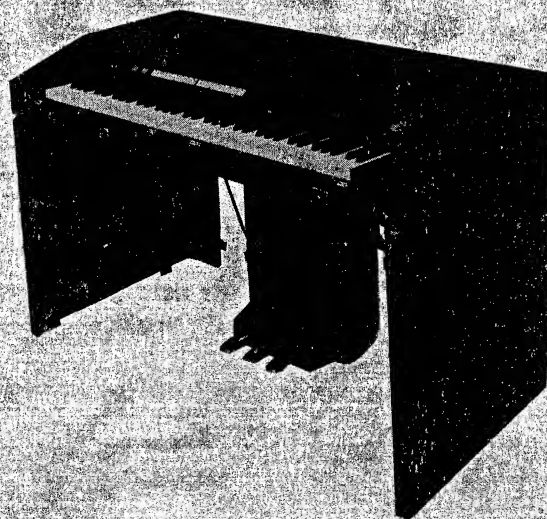
YAMAHA

COMBO KEYBOARD INSTRUMENTS

GS 1 / GS 2



GS1



GS2

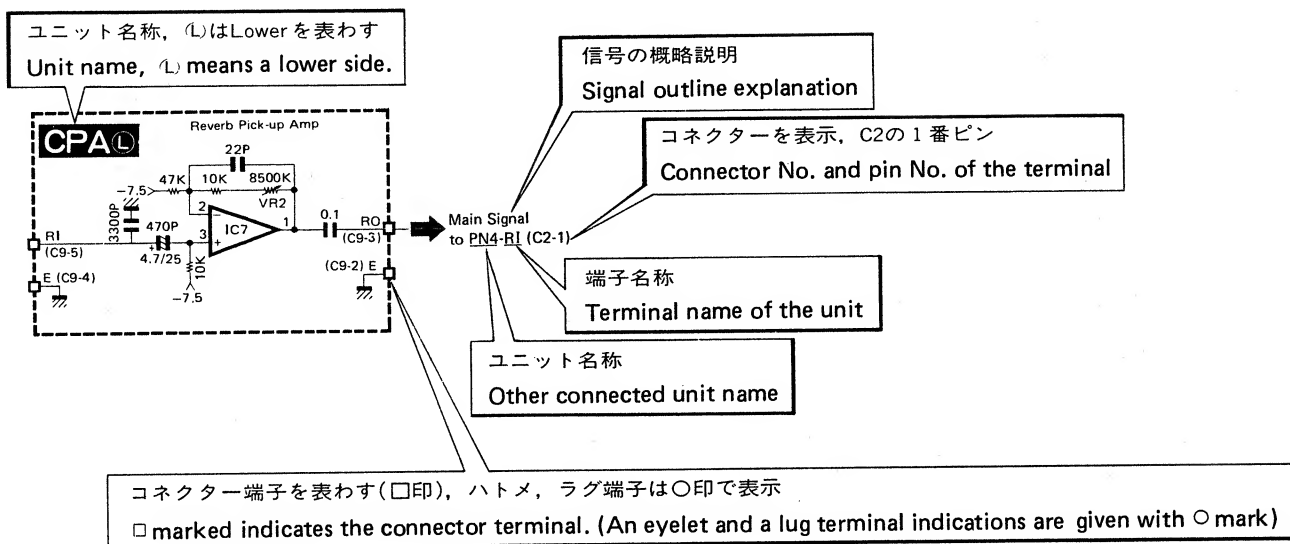
SERVICE MANUAL

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CODING GUIDE(活用の手引)

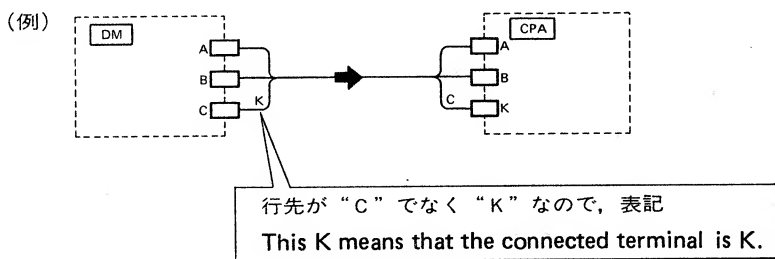
1, 回路図の見方 CIRCUIT DIAGRAM



上図はCPAユニット, コネクタ#9の3番端子ROよりパネル4のコネクタ#2の1番端子R1へ結線されている事を示しています。

尚, 総合回路図において, 信号およびデータラインの結線を, 複雑さを避ける為にまとめて表示している場合がありますが, 同一端子名どうしが結ばれる時は, 行先端子名を表記せず, 異なる端子と接続する相手端子を表記しています。

Above is a sample interconnecting code that is assigned to terminal RO of connector 9, pin 3 on CPA circuit board, the line from the RO connects to the terminal RI of connector 2, pin 1 on PN1 circuit board. In an overall circuit diagram, in order to avoid your confusion the signal lines and data lines have been mixed to be one line. In this case, when output terminal name and other connected terminal name is the same, its name is not written on the line, however, when the other terminal have a differ name, its name is shown on the line.



★信号表示

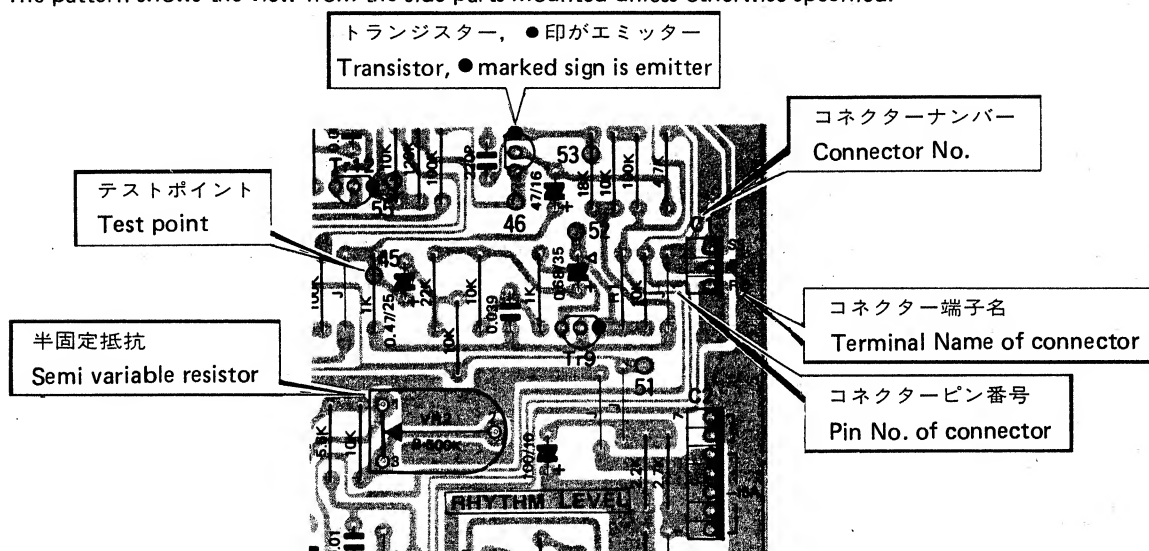
—▷—	キーコードデータ(オシロスコープで測定可)	Key code data	(possible to measure with a oscilloscope)
—◻—	パルス形信号(オシロスコープで測定可)	Pulse form signal	(— do. —)
—▽—	トリガーパルス(オシロスコープで測定可)	Trigger pulse	(— do. —)
—■—	楽音信号(シグナルトレーサで可聴)	Audio signal	(possible to measure with signal tracer)
—▶—	低周波変調信号(テスターで測定可)	Low frequency modulation signal	(possible to measure with VOM)
—>—	DCコントロール(テスターで測定可)	DC control signal	(— do. —)

- 全てのキャパシターは特に指定がない限り μ F表示です。
 - 全ての抵抗は特に指定がない限り1/4Wです。
 - 全てのスイッチ、ボタン類はOFFポジションを示しています。
 - 図中の K 印はセラミックキャパシター1000PFを示しています。
-
- All Capacitors are in μ F unless otherwise specified.
 - All Resistors are 1/4 watts unless otherwise specified.
 - All Keyswitches, Tabswitches and push button switches show "OFF" position.
 - "K" marked in Figs indicates 1000PF Ceramic Capacitors.

2. 基板図の見方 CIRCUIT BOARD

*断りのない場合は部品側からの表記です。

The pattern shows the view from the side parts mounted unless otherwise specified.



コネクタの接続はコネクタ表にて表示しております。

Show the connection table about the connection.

DMシート(ユニット)のコネクタナンバー
Connector No. of DM circuit board (unit)

No.	Pin Name	Wire Color	Destination
1	AIC	GY	PU-AIC (C3-8)
2	VE	YE	PN1-VE (C6-3)
3	VI	WH	PN1-VI (C6-4)

No.	Pin Name	Wire Color	Destination
1	VSS	BL 12	PU-E (C3-2)
2	VSS	BL 12	PU-3 (C3-3)
3	VSS	GR 12	PN1-EC2 (C5-1)
4	VSS	BL 12	PN1-VSS (C4-7)
5	VSS	BL 12	PN3-VSS (C3-3)
6	VSS	BL 12	EXP VSS (IC1-3)
7	VSS	--	-
8	-15D	RE 12	PU--15 (C3-5)
9	-15D	RE 12	PN4--15 (IC1-6)
10	-15D	RE 12	EXP LA (IC1-5)

行先ユニット名
Connected unit name

行先端子名
Connected terminal name

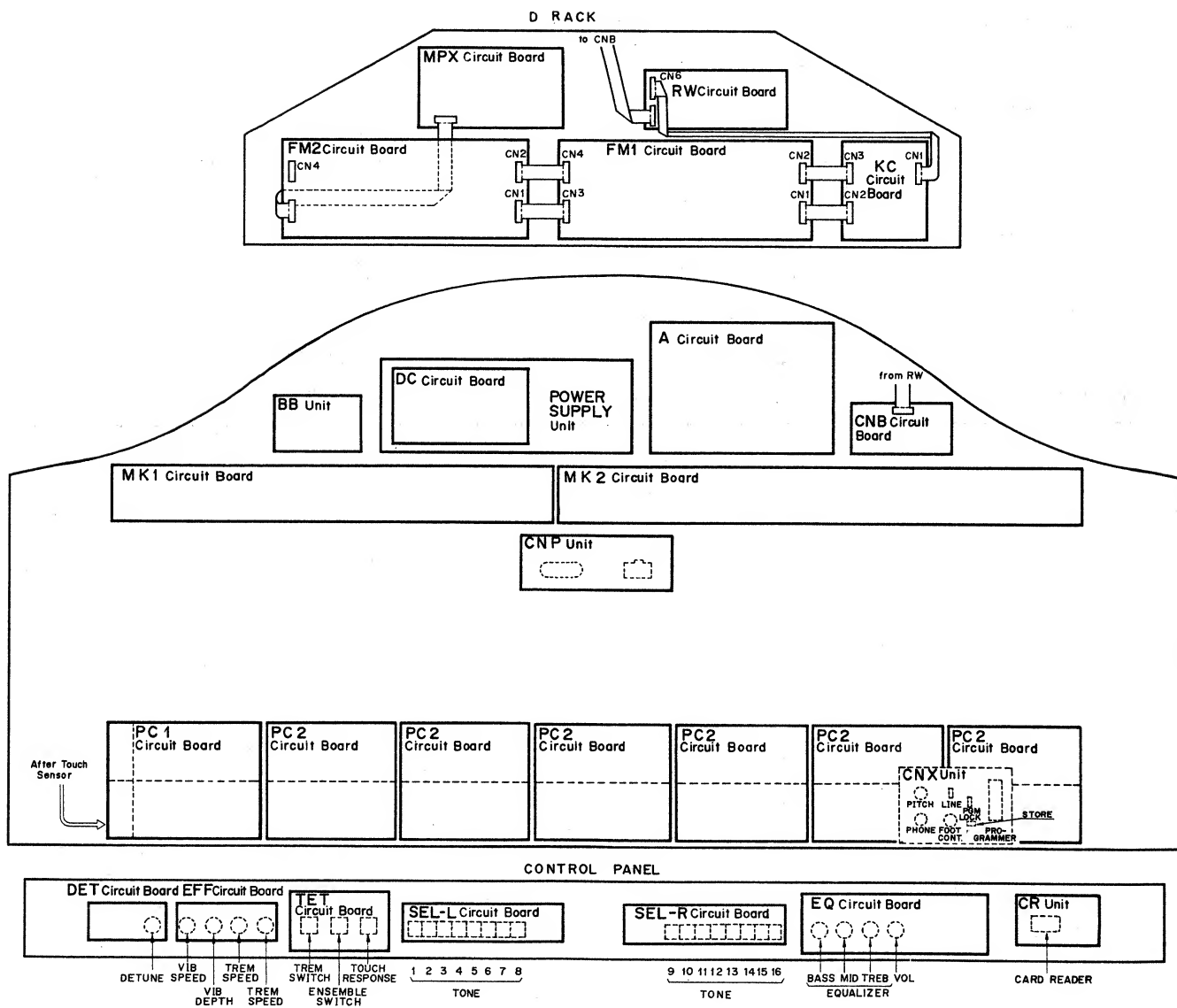
行先コネクターナンバー及ピン番号
Connected connector and pin No.

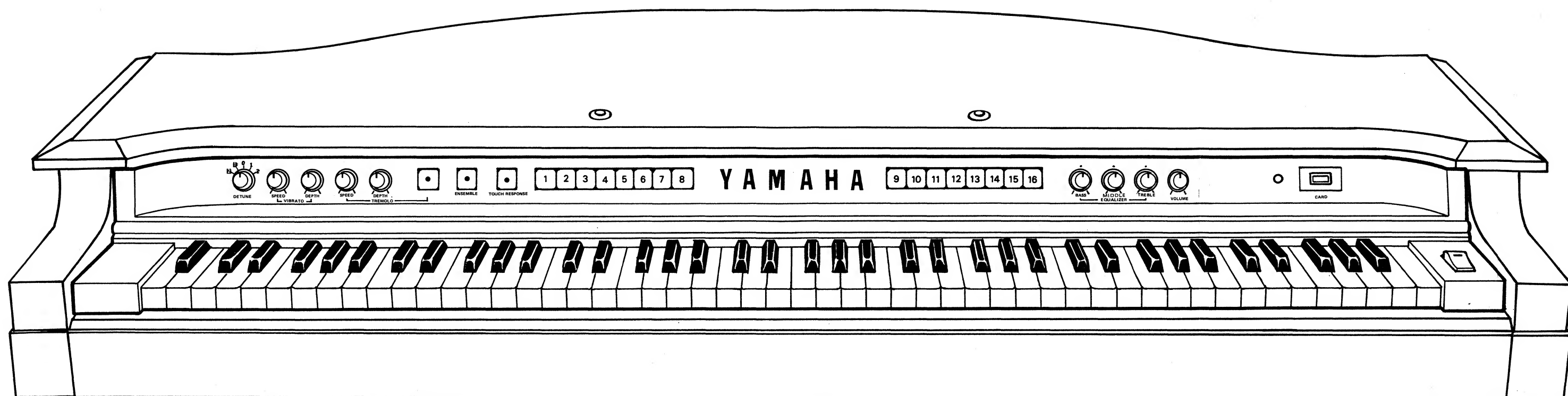
SPECIFICATIONS(総合仕様)

	GS1	GS2
KEYBOARDS	88 keys A ₋₁ ~ C ₇ (7 1/3 octaves)	73 keys E ₀ ~ E ₆ (6 octaves)
TONE GENERATOR	Frequency Modulation System 4 Carry 4 Modulation 8 EG	Frequency Modulation System 2 Carry 2 Modulation 4 EG
Maximum number of notes	16 notes	16 notes
CONTROL PANEL		
DITUNING	RANDOM 2 RANDOM 1 OFF 0 STATIC 1 STATIC 2	OFF 0 STATIC 1 STATIC 2
TREMOLO	TREMOLO SPEED (1 ~ 6Hz) TREMOLO DEPTH	TREMOLO SPEED (0.8 ~ 10Hz) TREMOLO DEPTH
VIBRATO	VIBRATO SPEED (4 ~ 10Hz) VIBRATO DEPTH	VIBRATO SPEED (4 ~ 10Hz) VIBRATO DEPTH
TREMOLO Switch	ON – OFF	ON – OFF
ENSEMBLE Switch	ON – OFF	ON – OFF
TOUCH RESPONSE Switch	ON – OFF	
TONE SELECTORS	1, 2, 3, 4, ~ 16	1, 2, 3, 4, ~ 16
IQUALIZER	BASS ±12dB at 100Hz MID-RANGE ±12dB at 600Hz TREBLE ±10dB at 6KHz	BASS ±12dB at 100Hz MID-RANGE ±12dB at 600Hz TREBLE ±10dB at 6KHz
MASTER VOLUME	(Control Panel)	(Control Panel)
CARD READER	2 Pass/Tone	1 Pass/Tone
STORE Switch	(Bottom Panel)	(Control Panel)
OTHER PANELS		
MASTER PITCH	+35 Cent ~ -25 Cent (Bottom Panel)	+35 Cent ~ -25 Cent (Control Panel)
HEADPHONES Jack	8Ω Mixed OUT (Bottom Panel)	8Ω Mixed OUT (Front Rail)
FOOT CONTROL Jack	For EXP. Pedal (Bottom Panel)	For EXP. Pedal (Rear Panel)
PGM. LOCK Switch	IN – OUT (Bottom Panel)	LOCK – UNLOCK (Rear Panel)
LINE Switch	ON – OFF (Bottom Panel)	ON – OFF (Front Rail)
PROGRAMMER Connector	24P (Bottom Panel)	24P (Rear Panel)
BATTERY (Memory back-up)	UM3 x 2 (Bottom Panel)	UM3 x 2 (Bottom Panel)
PEDAL CONTROLS		
DAMPER Pedal	ON – OFF	ON – OFF
TREMOLO Pedal	ON – OFF	ON – OFF
VIBRATO Pedal	ON – OFF	ON – OFF

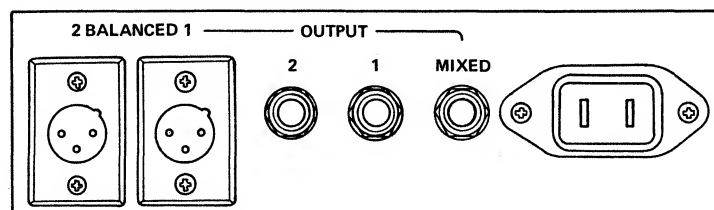
	GS1	GS2
OUTPUT		
OUTPUT Jack (0dB)	CH1, CH2, MIXED (Pedal Unit)	CH1, CH2, MIXED (Rear Panel)
Balanced OUTPUT (–20dB)	CH1, CH2 (Pedal Unit)	CH1, CH2 (Rear Panel)
POWER CONSUMPTION		
INPUT	AC100V, 120V, 220V, 240V 95W	AC100V, 120V, 220V, 240V 40W
DIMENSIONS		
Width	1,500 mm (59")	1,283 mm (50-1/2")
Depth	832 mm (32-3/4")	641 mm (25-1/4")
Height	826 mm (32-1/2")	823.5 mm (32-1/2")
Weight	90 kg (198.4 lbs)	72 kg (158.7 lbs)

GS1 UNIT LAYOUT



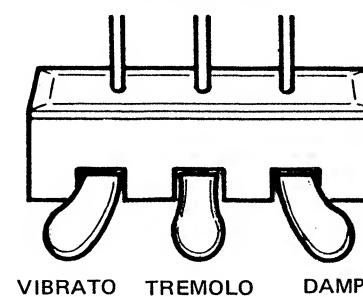


PEDAL Unit Back Panel

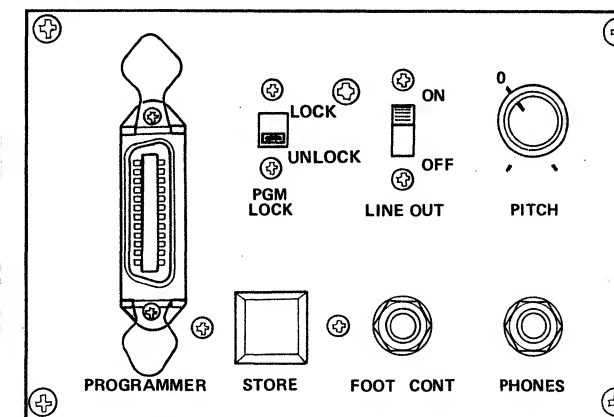


PEDAL Unit

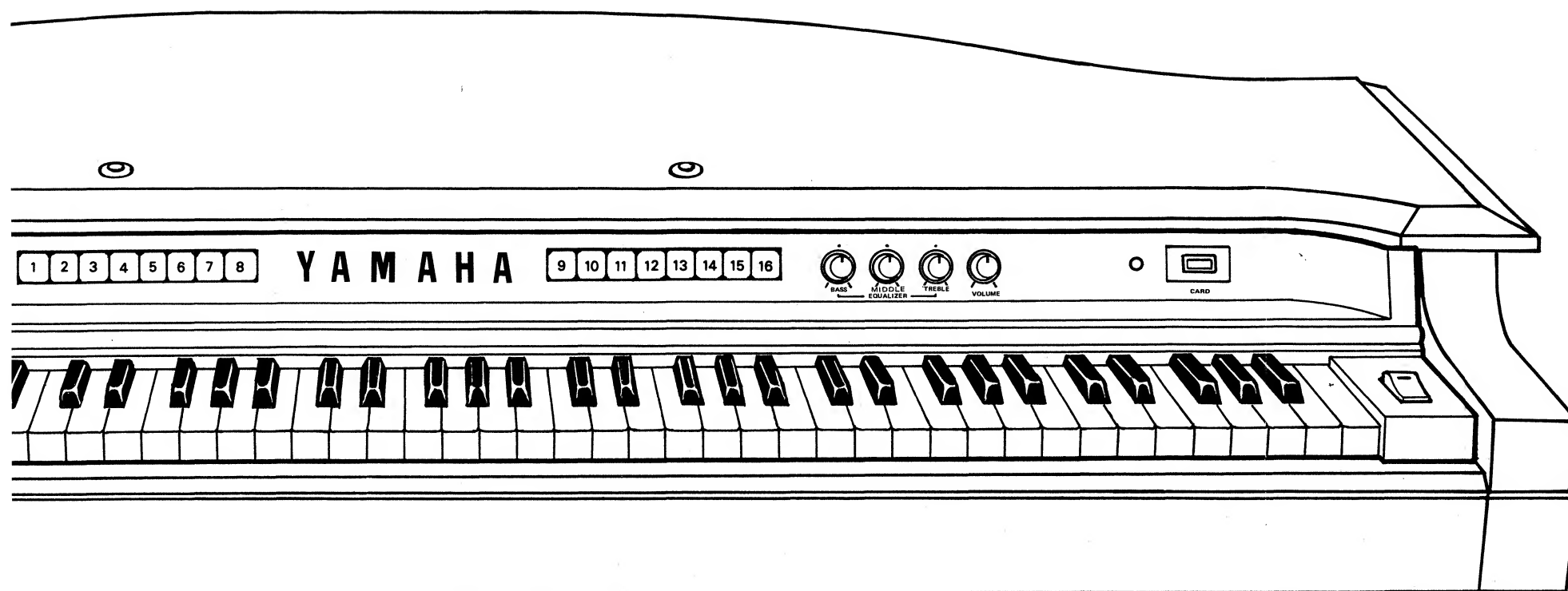
Front View



CNX Unit Panel

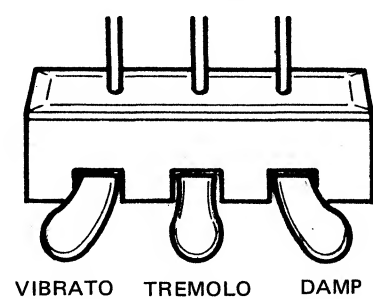


GS1 PANEL LAYOUT

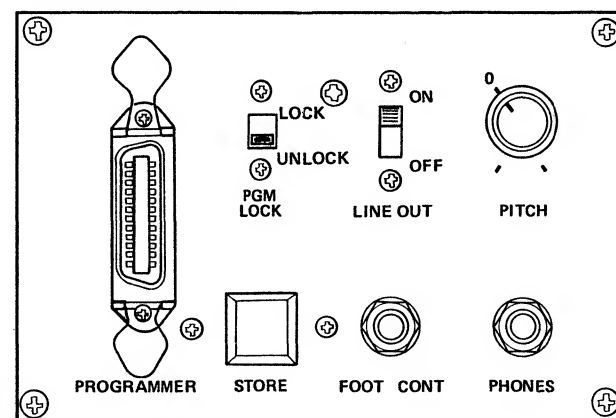


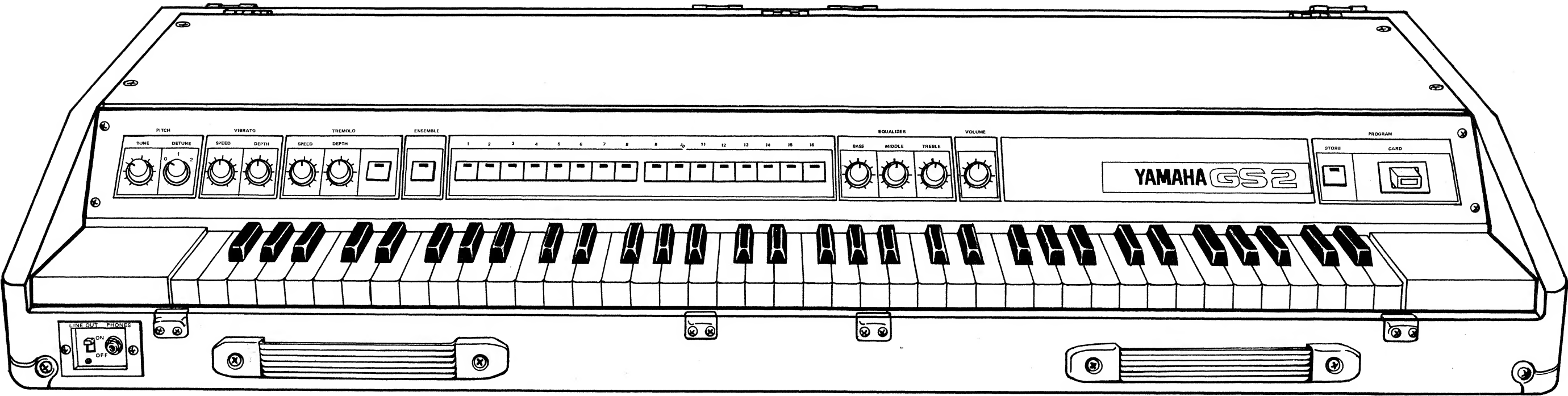
PEDAL Unit

Front View

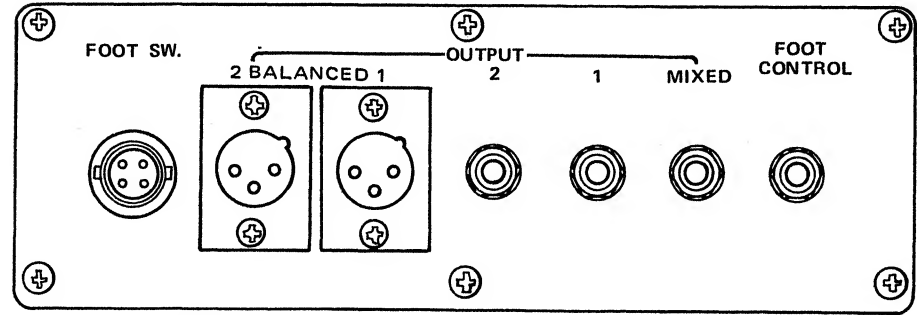


CNX Unit Panel

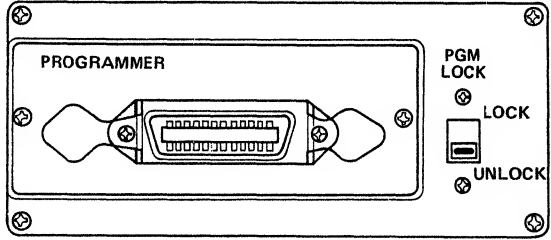




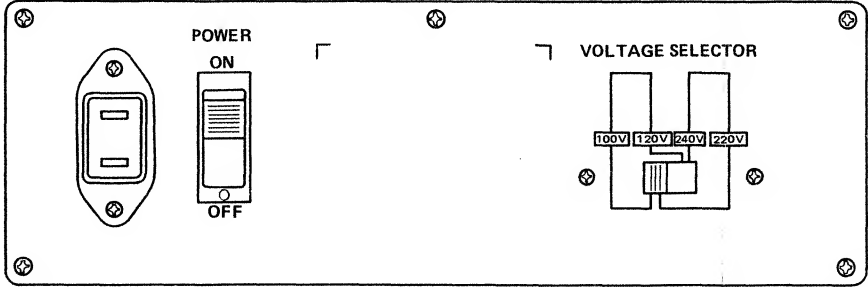
I/O Unit (Rear Panel)



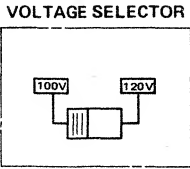
PGM Unit (Rear Panel)



AC Circuit Board (Side Panel)

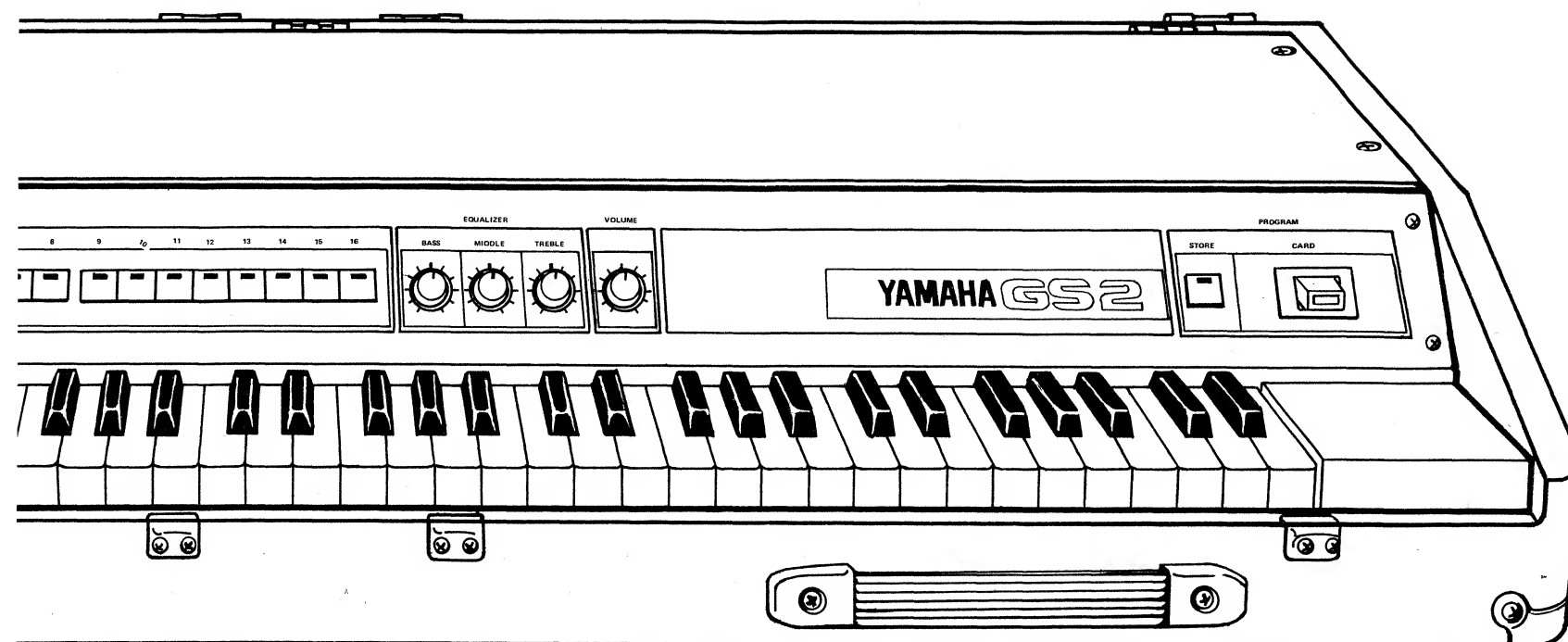


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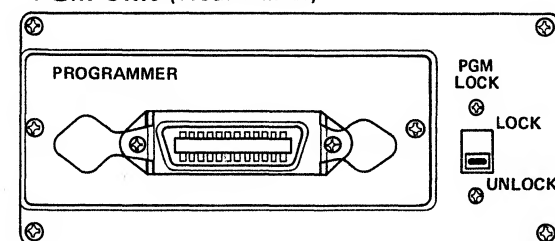


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CANADIAN
JAPAN)

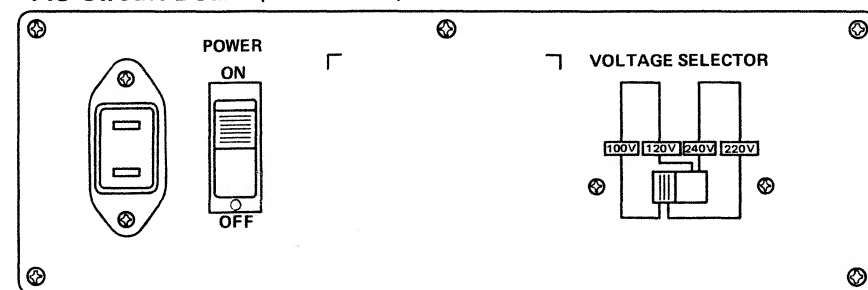
GS2 PANEL LAYOUT • UNIT LAYOUT



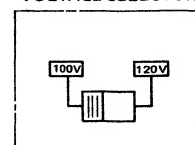
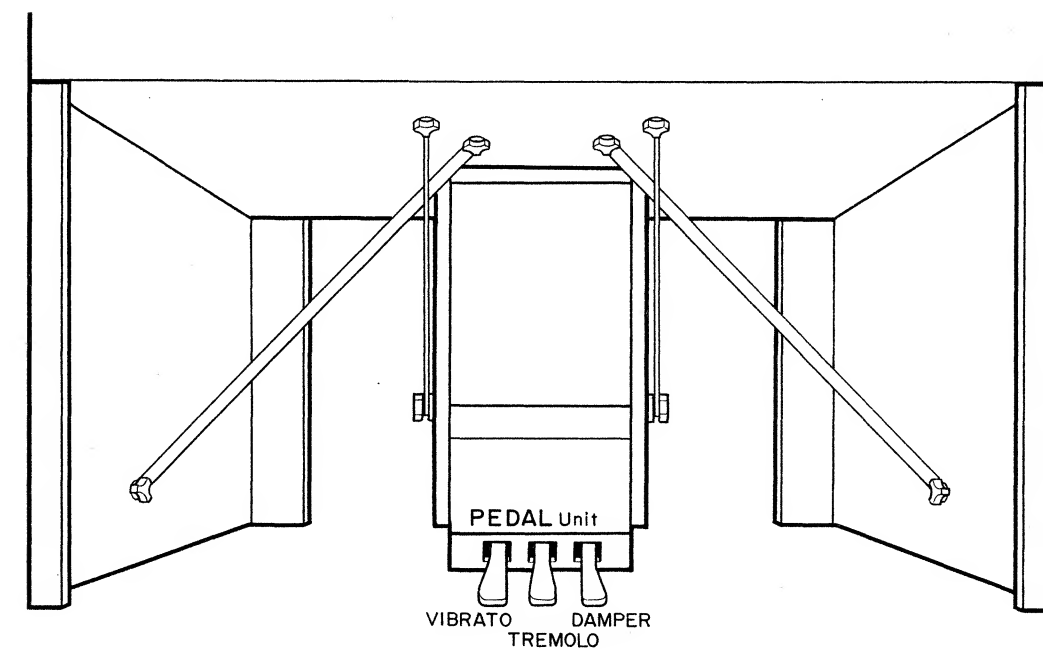
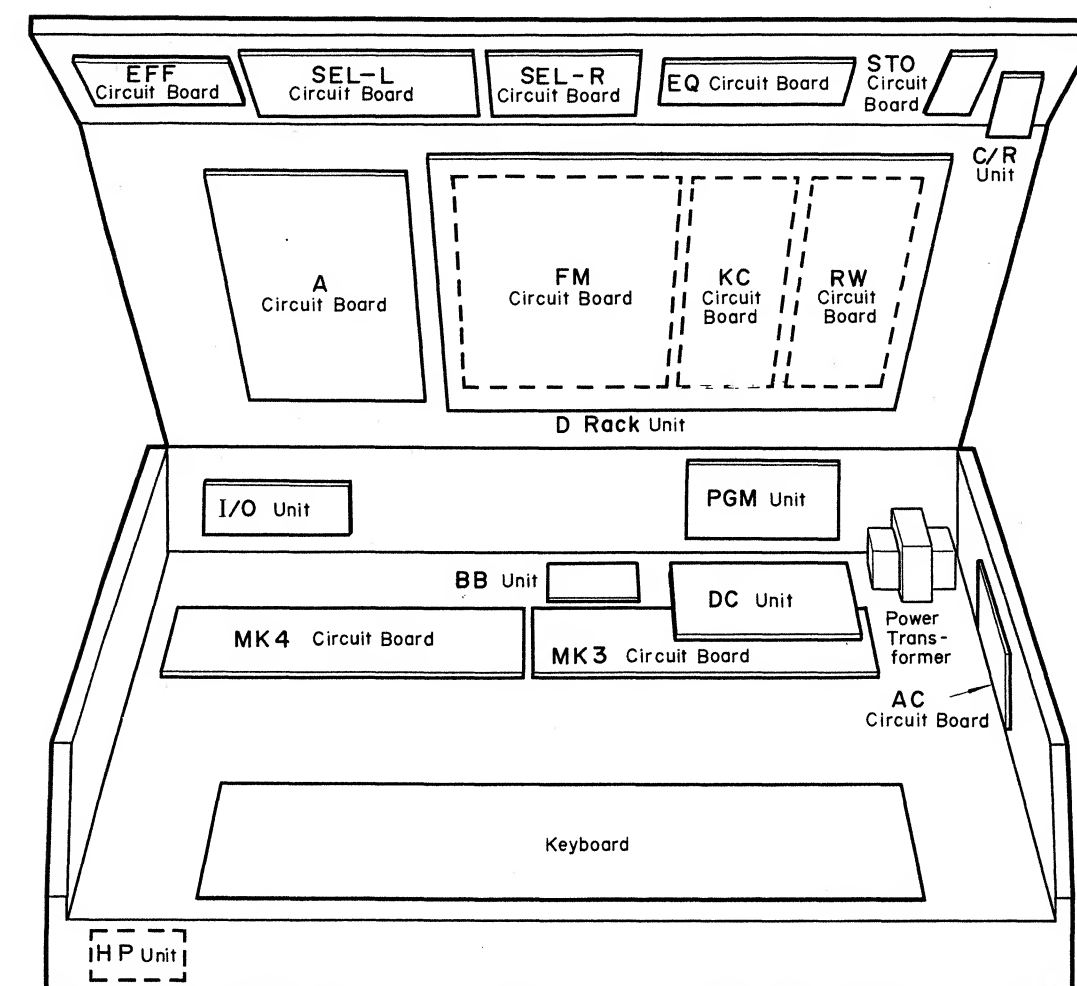
PGM Unit (Rear Panel)

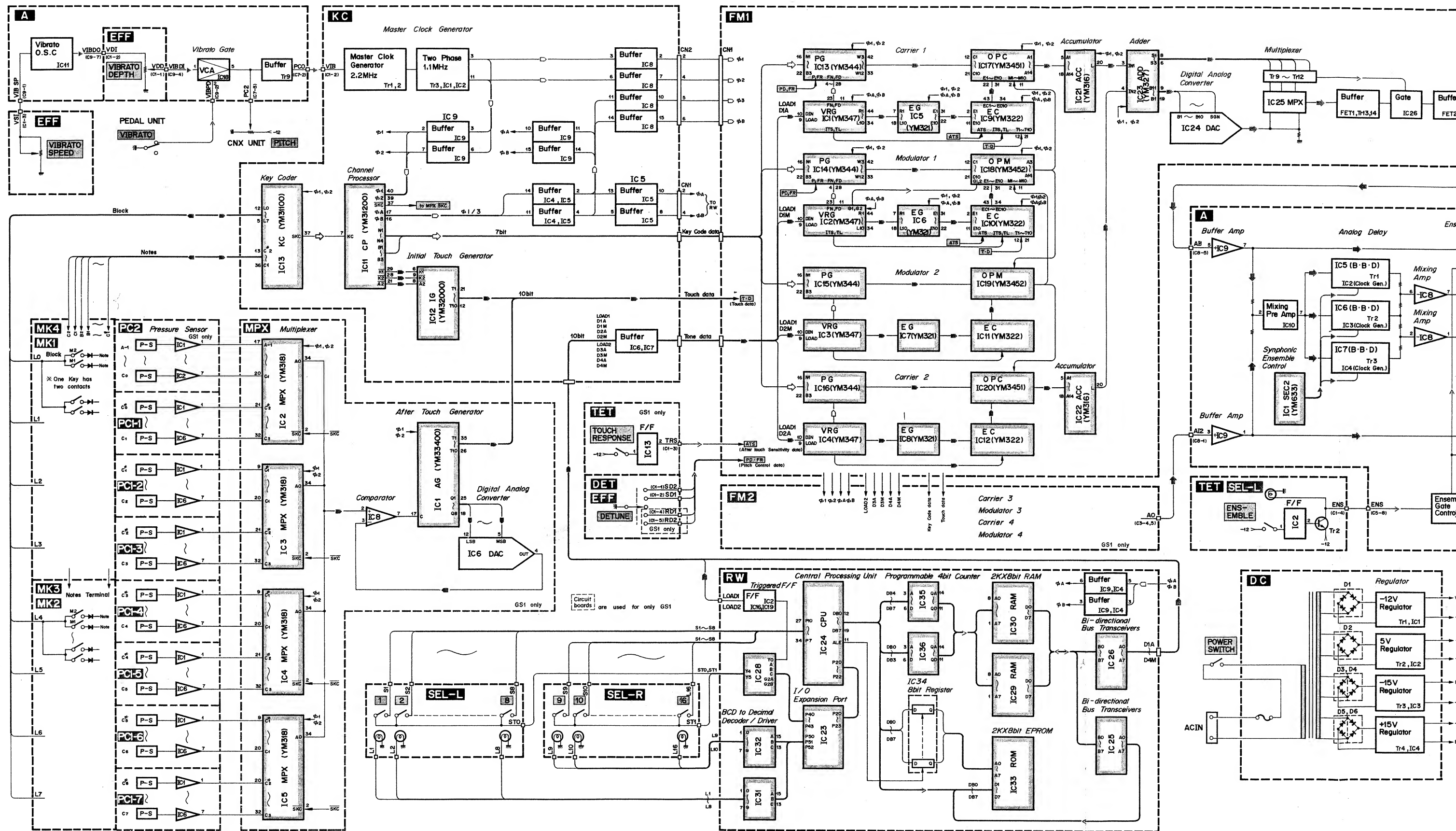


AC Circuit Board (Side Panel)

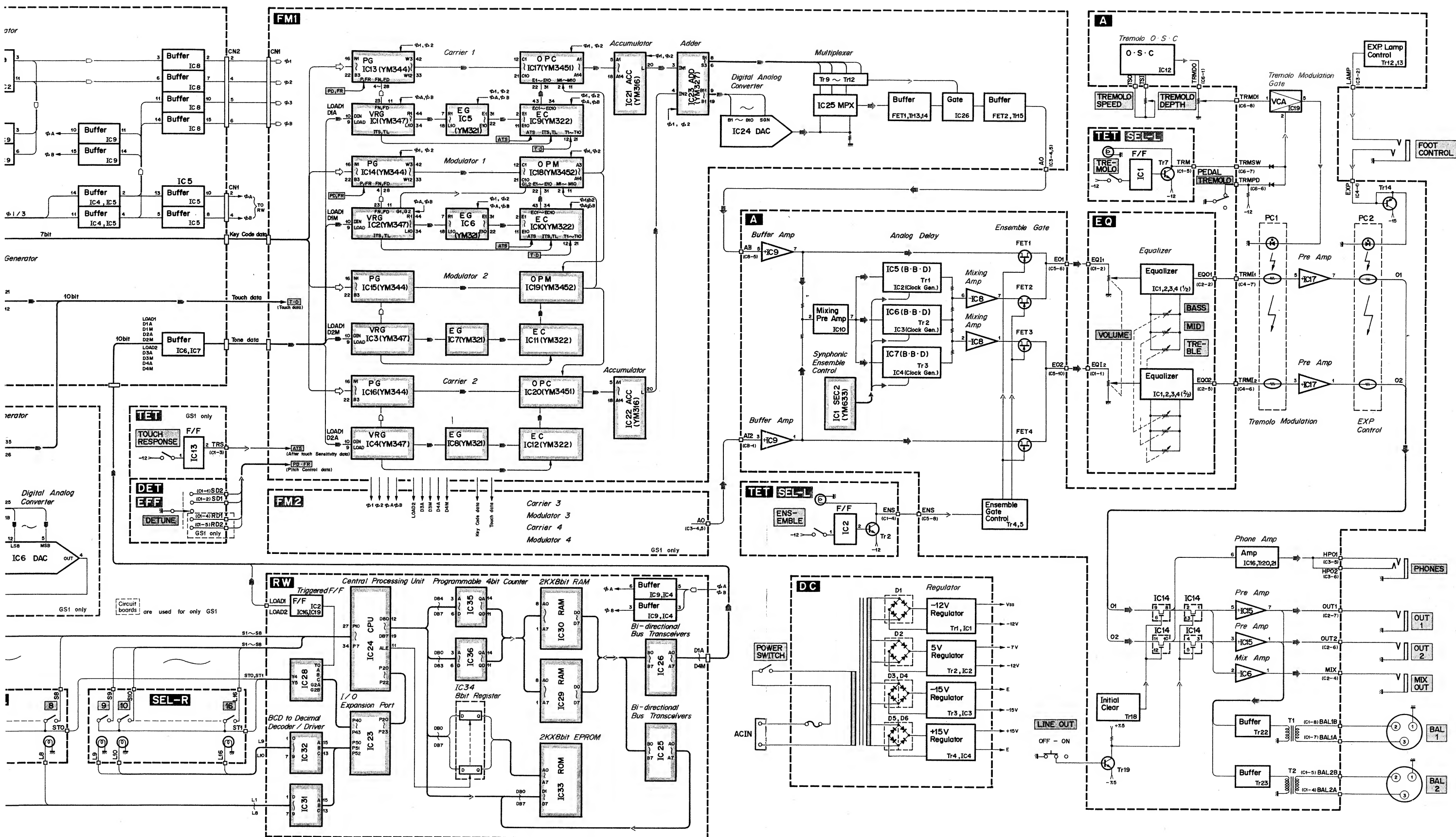
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VOLTAGE SELECTOR

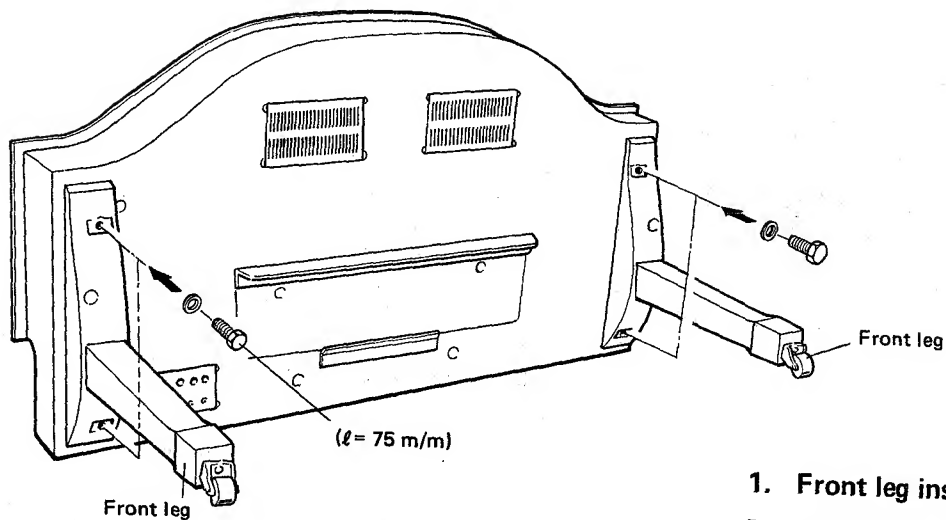
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GS1/GS2 Block Diagram



GS1 ASSEMBLY PROCEDURE (組立手順)

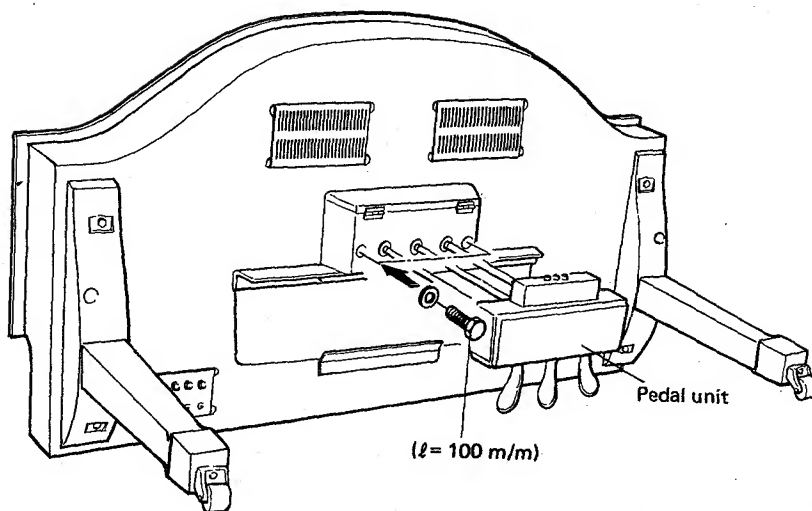


1. Front leg installation

Lay the body on its back as illustrated and fix the front legs with bolts and washers.

1. 前脚の取り付け

本体を図のように横にして、前脚をボルトとワッシャで固定します。

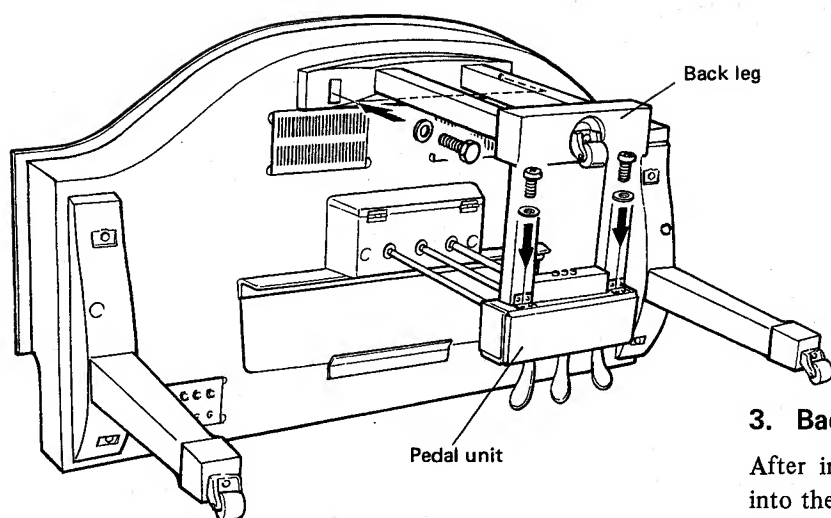


2. Pedal unit installation

Next, fix the pedal unit with bolts and washers.

2. ペダルユニットの取り付け

次に、ペダルユニットをボルトとワッシャで固定して下さい。



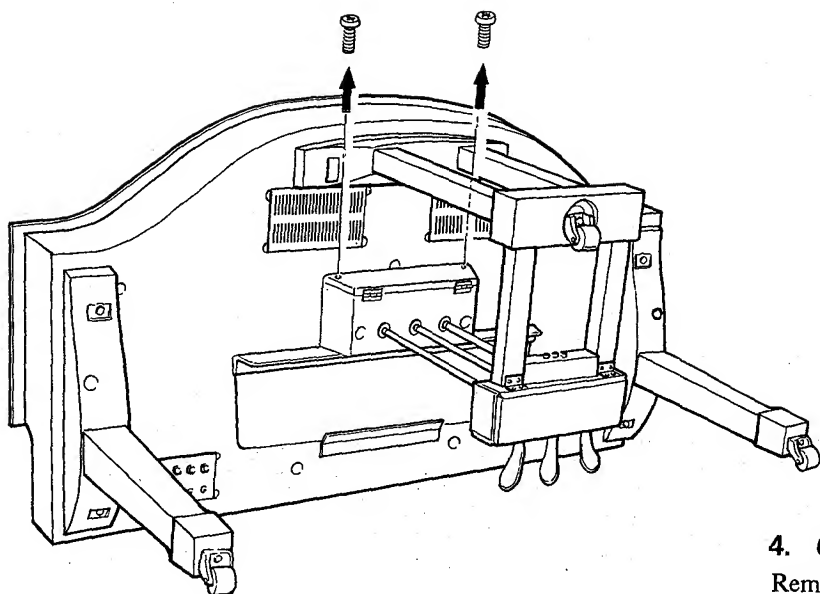
3. Back leg installation

After inserting the bottom beams of the back leg into the pedal unit, fix the back leg with bolts and washers.

Then fasten the back leg beams onto the pedal unit with screws and washers.

3. 後脚の取り付け

後脚の横柱をペダルユニットに差し込んだ後、後脚をボルトとワッシャで固定します。その後、後脚の横柱とペダルユニットをネジとワッシャで連結して下さい。



4. Connectors installations

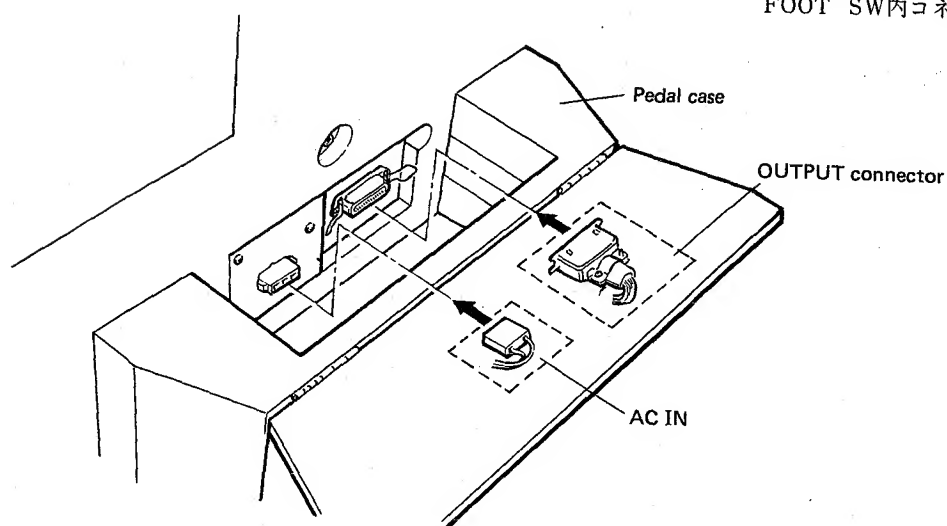
Remove the screws of the pedal unit. Connect the two connectors inside the unit. Then replace the screws tightly.

Connect the pedal cable to the FOOT SW connector or as illustrated.

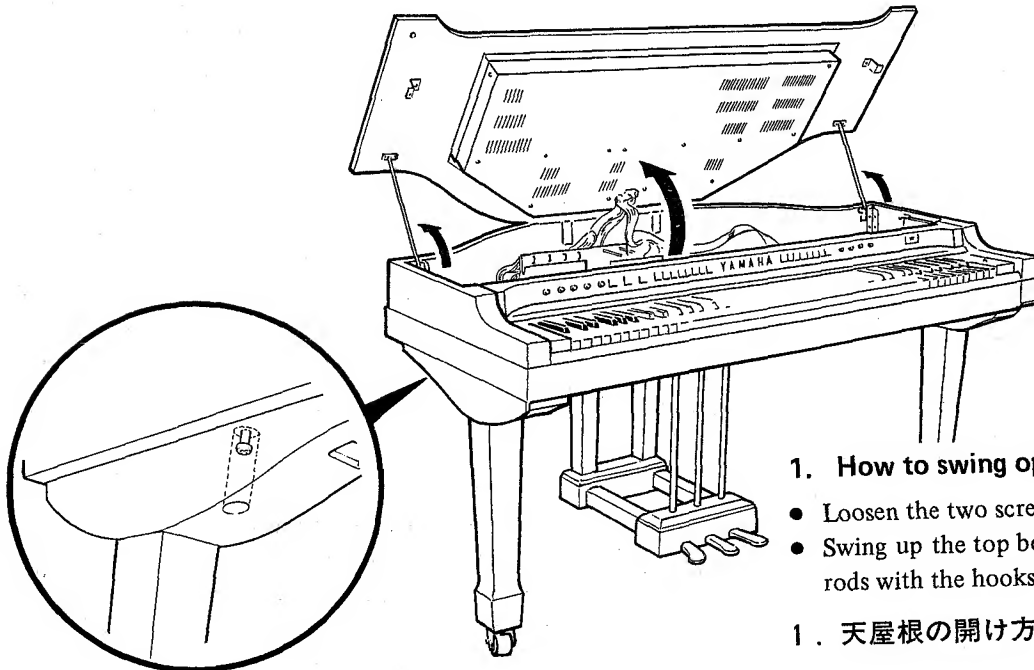
4. コネクタの取り付け

ペダルユニットのネジを外し内部のコネクタ2個を連結し、再びネジを固定します。

ペダル箱よりペダルケーブルを取り出し、図の様に FOOT SW内コネクタへ取り付けます。



GS1 DISASSEMBLY PROCEDURE (分解手順)

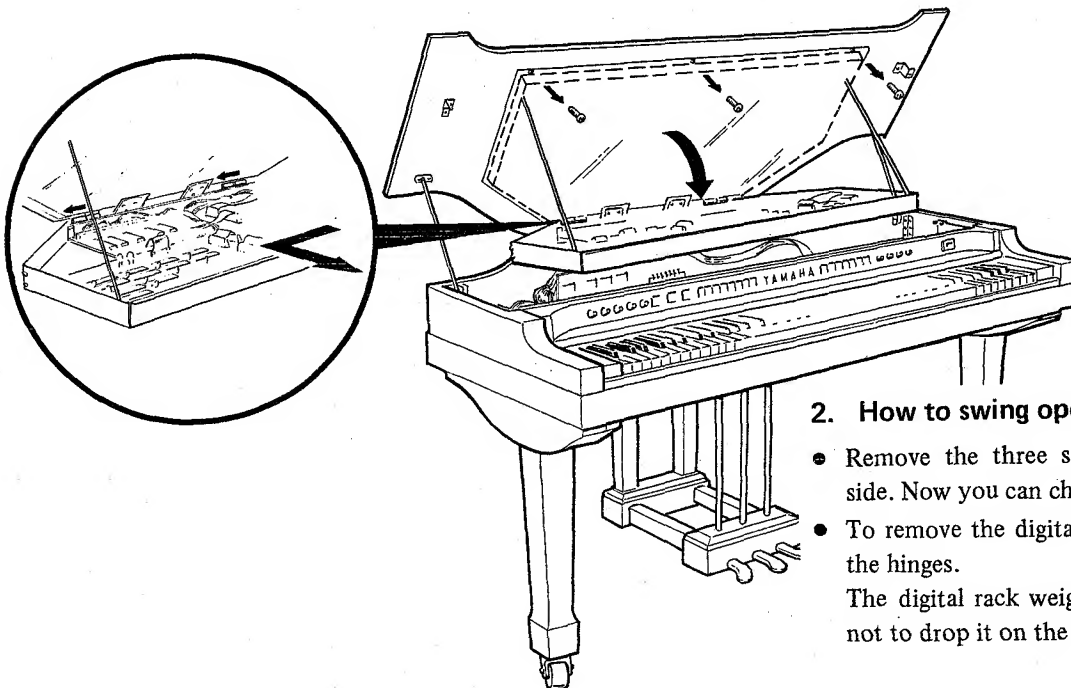


1. How to swing open the top board

- Loosen the two screws fixing the top board.
- Swing up the top board and catch the supporting rods with the hooks fitted on the top board.

1. 天屋根の開け方

- 天屋根止めビスをゆるめます。(2ヶ所)
- 天屋根を開き、ささえ金具を天屋根のフックに引かけて下さい。

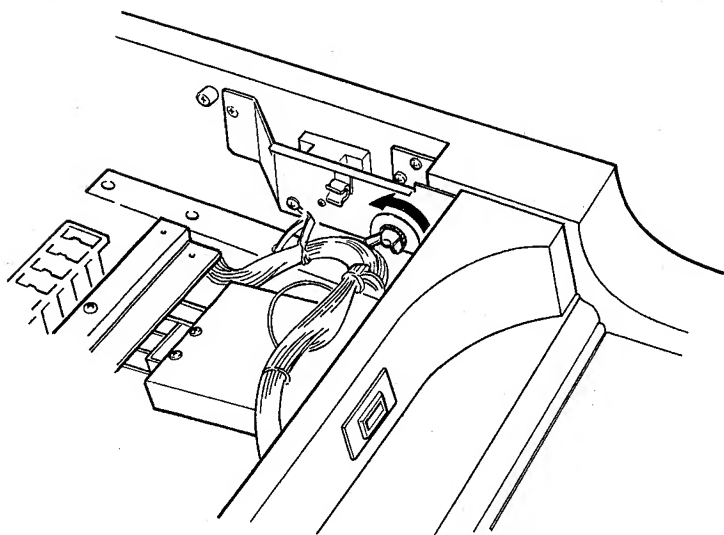


2. How to swing open the digital rack

- Remove the three screws located on the front side. Now you can check it.
- To remove the digital rack, slide it to the left at the hinges.
The digital rack weights considerably. Take care not to drop it on the power supply unit.

2. デジタルラックの開け方

- 手前側3本のネジを外せば、デジタルラックは、前方に開き、チェック出来る状態になります。
- デジタルラックは、蝶番の所を左にずらせば外すことが出来ます。
この場合、デジタルラックはかなり重いので、電源ユニットの上へ落とさない様注意して下さい。

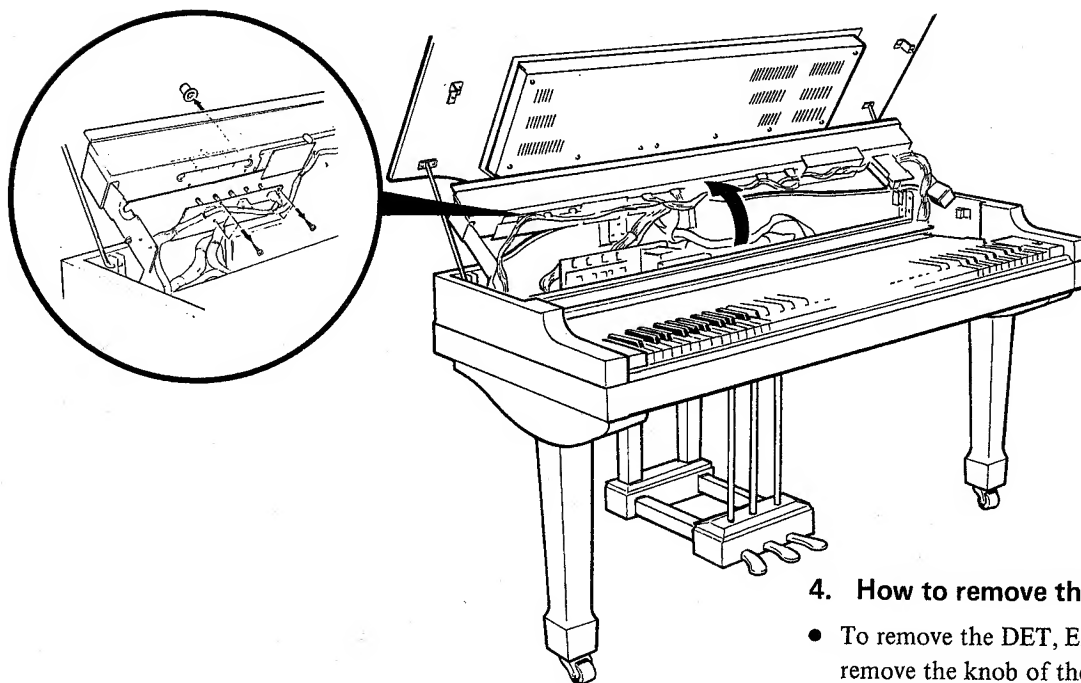


3. How to erect the control panel

Loosen the wing bolts located on the left and right sides as illustrated and erect the control panel.

3. コントロールパネルの起こし方

図の様に左右2ヶ所にある蝶ボルトをゆるめて、コントロールパネルを起こします。

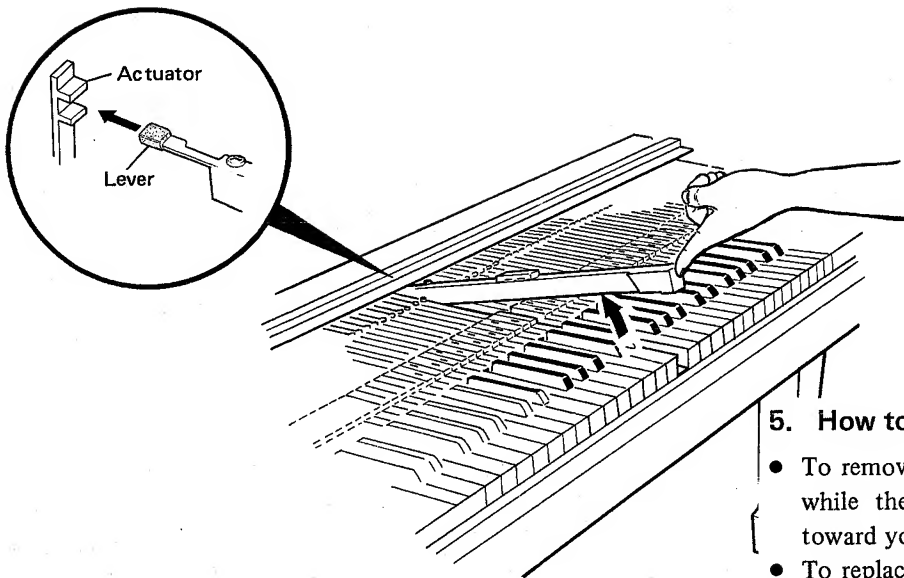


4. How to remove the panel circuit board

- To remove the DET, EFF, and EQ circuit boards, remove the knob of the panel first.
- Loosen the screws of the panel circuit board when the control panel is erected as illustrated. Then remove the circuit board.

4. パネルシートの外し方

- DET, EFF, EQシートを外す場合は、あらかじめパネルのつまみを外しておきます。
- 図の様にコントロールパネルを起こした状態で、パネルシートのビスをゆるめて、シートを外します。



5. How to remove a key

- To remove a key, lift it on the end nearer to you while the control panel is erected and pull it toward you.
- To replace the key, fit the lever to the depression of the actuator.

5. 鍵盤の外し方

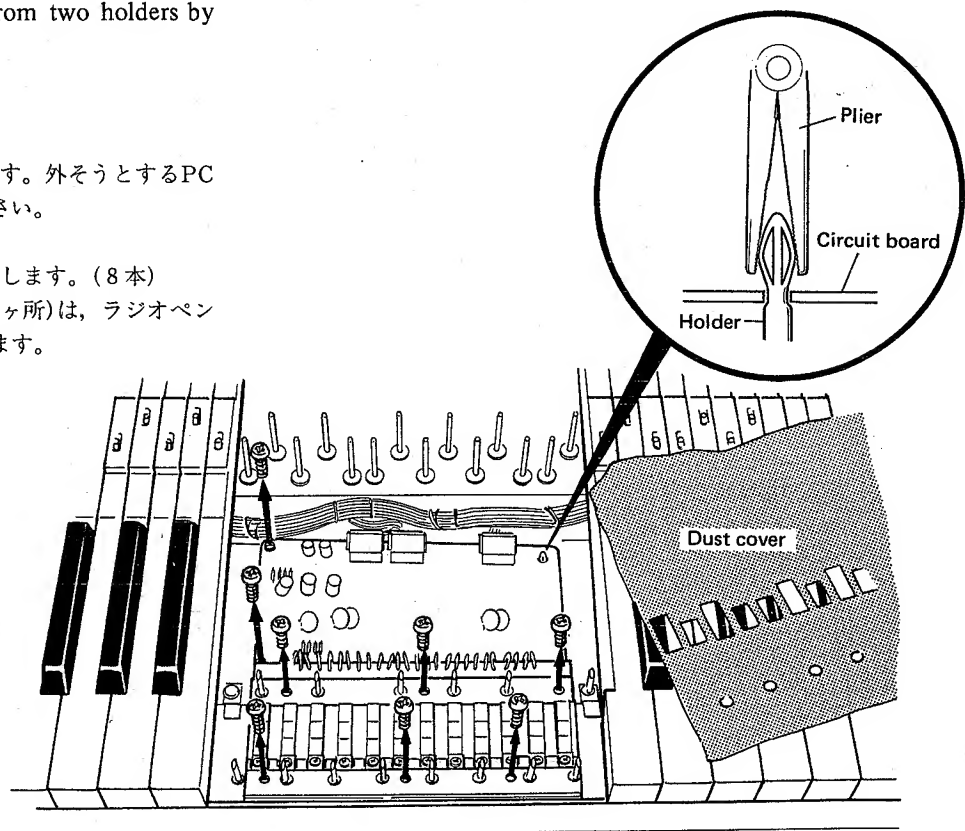
- コントロールパネルを起こした状態で図の様に鍵盤の手前側を持ち上げて、手前に引き出せば鍵盤を外すことが出来ます。
- 鍵盤をもとにもどす時には、レバーがアクチュエーターの凹部に入るように位置を合わせて下さい。

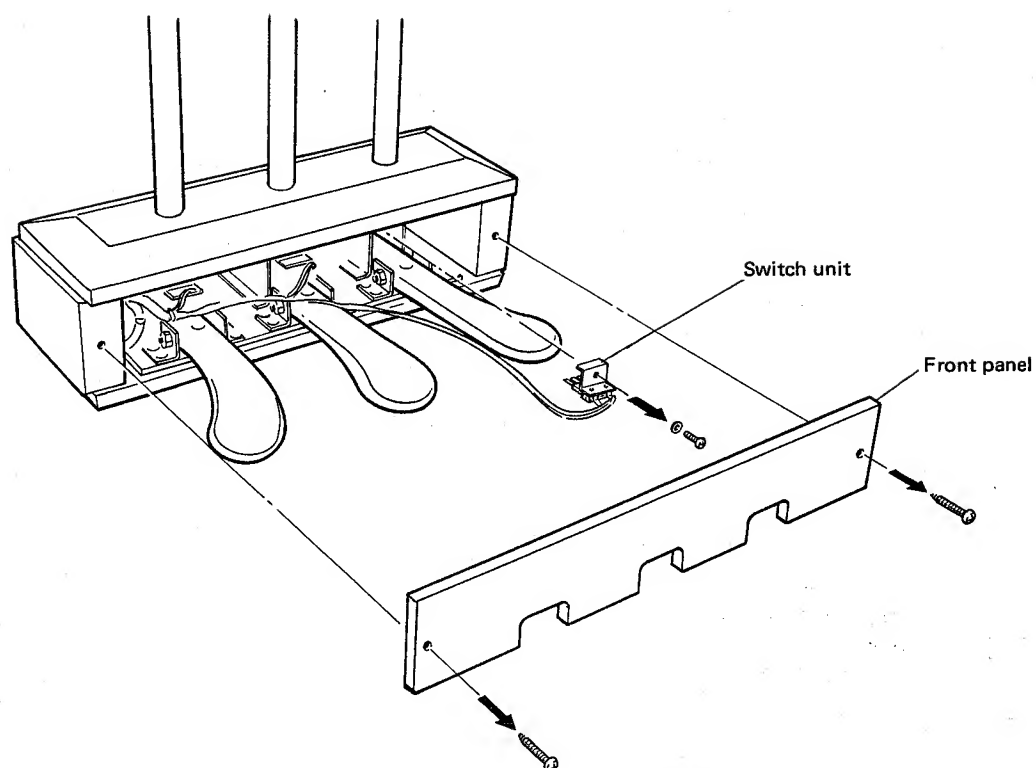
6. How to remove the PC circuit board

- The PC circuit board is located under the keyboard. Remove the keys located over the PC circuit board to be removed.
- Remove the dust cover.
- Remove the eight screws fixing the PC circuit board.
- Remove the circuit board from two holders by squeezing them with pliers.

6. PCシートの外し方

- PCシートは、鍵盤の下にあります。外そうとするPCシート上の鍵盤を取り外して下さい。
- 防塵カバーを外して下さい。
- PCシートを止めているビスを外します。(8本)
- ホルダーで固定してある箇所(2ヶ所)は、ラジオペンチではさんでから外すようにします。





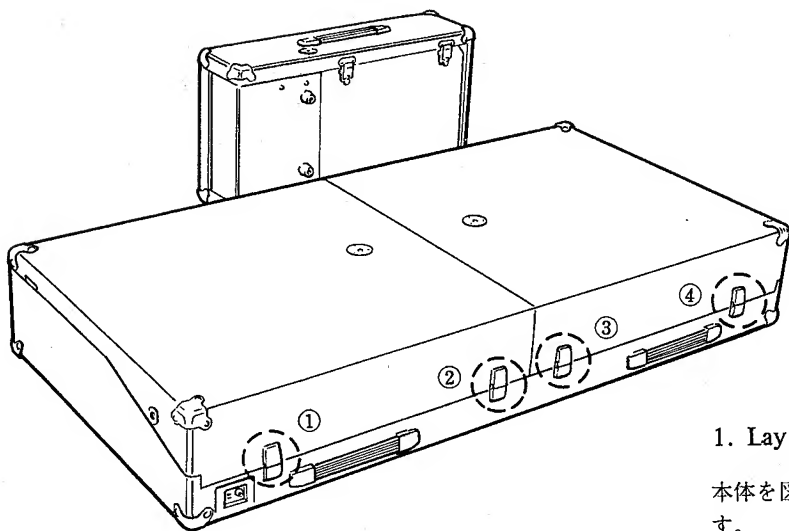
7. How to remove a pedal switch

- Remove the front panel of the pedal unit.
- Loosen the screw accessible from the front side and the switch unit can be removed.

7. ペダルスイッチの外し方

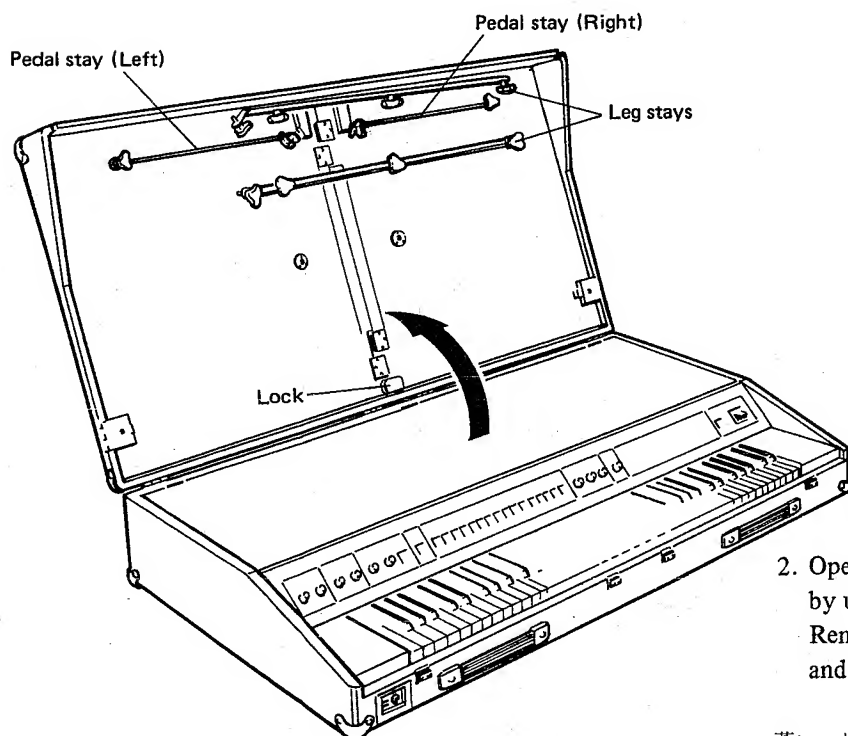
- ペダルユニットの前面パネルを外します。
- スイッチユニットは前面からビスをゆるめれば外すことが出来ます。

GS2 ASSEMBLY PROCEDURE (組立手順)



1. Lay the case as illustrated. Release locks ①~④ .

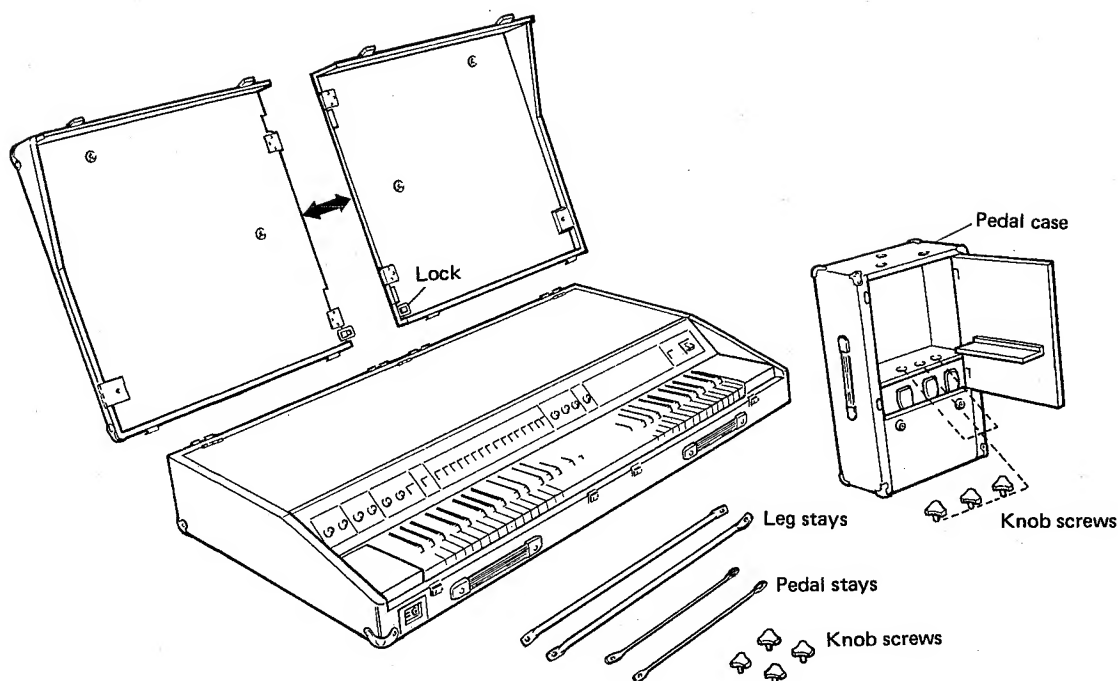
本体を図のように置き、①~④のパッチン錠をはずします。



2. Opening the lid fully, remove it from the bottom by uncoupling the two rear hinges. Remove the eight knob screws, the leg stays, and the pedal stays.

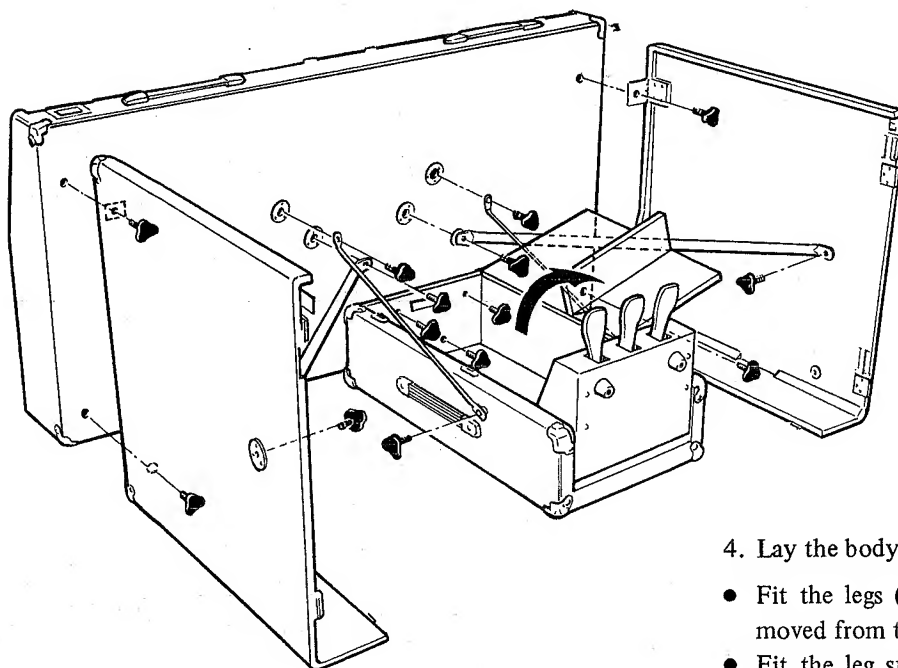
蓋いっぱいを開き、後側の2個のヒンジより蓋をはずします。

蓋内部に取り付けられている脚柱、ペダルステーを、8個のノブネジをはずし取り出します。



蓋内部のパッチン錠をはずして蓋を2つに分け、本体の脚にします。

3. Release the lock of the lid and divide it into two parts to use it as legs.



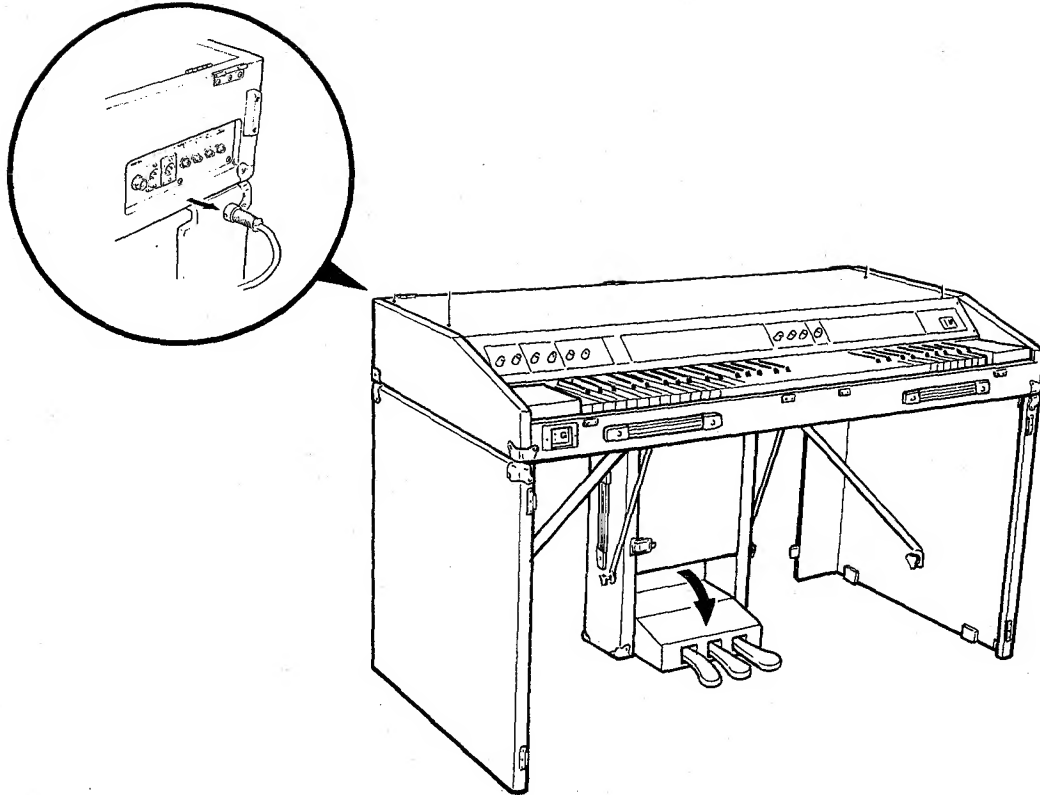
本体を図の様に、横にします。

- 蓋脚を取りつけます。(蓋内部からとりはずした4本のノブネジを使います)
- 脚柱を取りつけます。(脚柱に付いている4本のノブネジを使います)
- ペダル箱を取りつけます。(ペダル箱内の3本のノブネジを使います)
- ペダルスターの右、左を確認して取り付けます。(ペダルスターに付いている4本のノブネジを使います)

4. Lay the body on its back as illustrated.

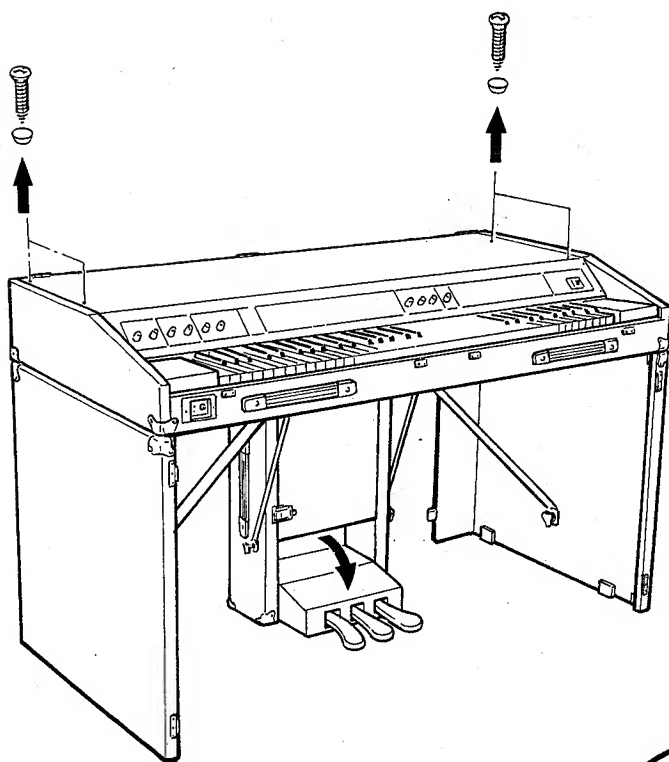
- Fit the legs (lid) (use the four knob screws removed from the lid).
- Fit the leg stays (use the four knob screws provided for the leg stays).
- Fit the pedal case (use the three knob screws provided in the pedal case).
- Fit the pedal stays (use the four knob screws provided for the pedal stays). Note that the left and right pedal stays differ. Install each at the right place.

Connect the pedal cable, put in the pedal case, to the foot switch connector on the rear panel.



- Connect the pedal cable to the FOOT SW connector as illustrated.
- ペダル箱よりペダルケーブルを取り出しリヤパネルの FOOT SW 用コネクタへ取り付けます。

GS2 DISASSEMBLY PROCEDURE (分解手順)

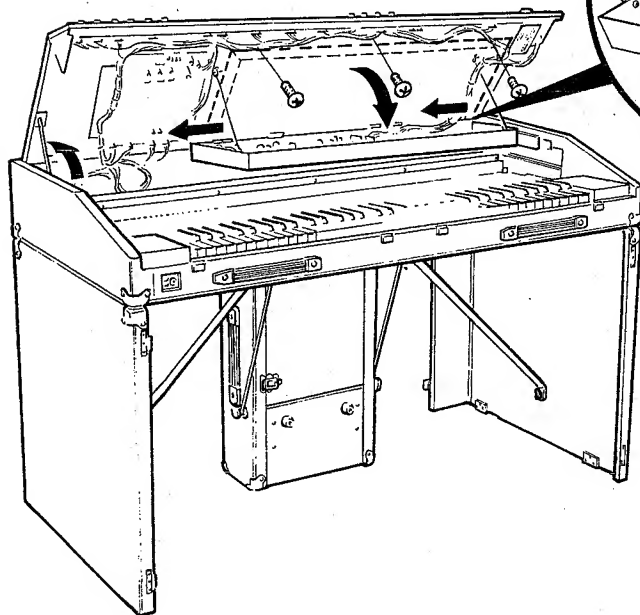


1. Opening top board

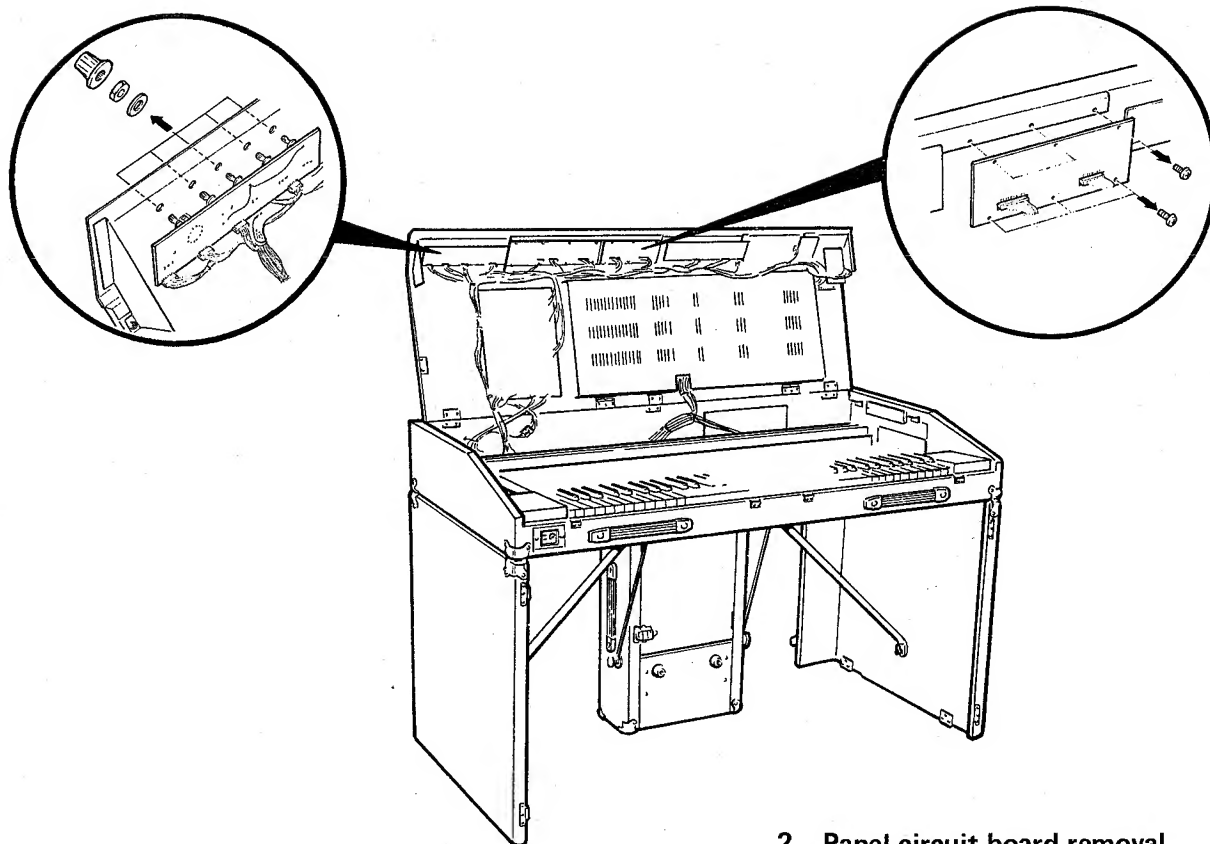
Remove the four screws fastening the top board.

1. 天屋根のあけ方

天屋根止めネジ4本を取りはずします。



- Open the top board and catch the left and right stays with the stay hooks securely.
- To check the digital rack, remove the three screws illustrated.
- To remove the digital rack, remove the rack ropes and move it to the left so that it slips off at the hinges. You may work more easily in this condition.
- 天屋根を開き左右の屋根ステー受け金具に確実にかけます。
- デジタルラックは、図の3本の止めネジをはずす事で、チェックが可能な状態となります。
- デジタルラックは、ラックロープをはずし、デジタルラック全体を左側に押す事で蝶番部よりはずれ、より作業を楽にする事が出来ます。

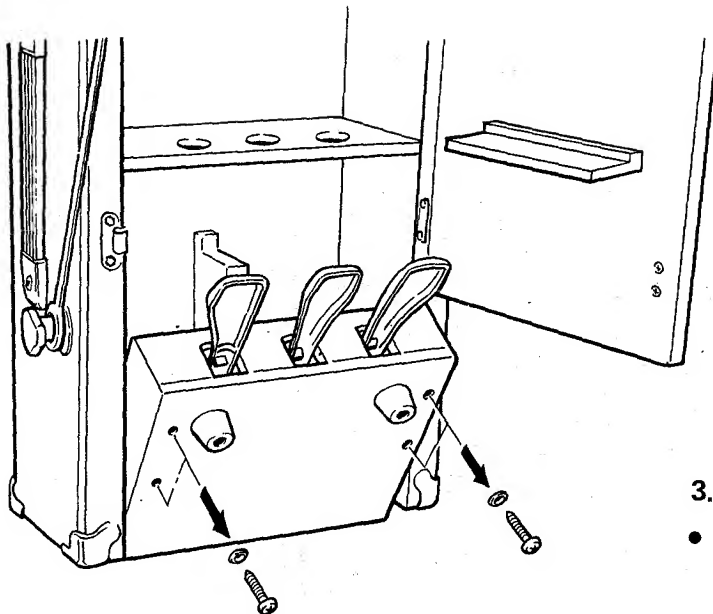


2. Panel circuit board removal

- To remove the panel circuit boards, remove the control knobs on the panel surface and hex nuts. (EFF and EQ circuit boards)
- Remove screws from the circuit board side. (SELL, SELR and STO circuit boards)

2. パネルシートの外し方

- パネル面よりパネルボリュームのつまミと六角ナットをはずすと、シートをはずす事が出来ます。(EFF, EQシート)
- シート側より止めネジを外す事でシートをはずす事が出来ます。(SELL, SELR, STOシート)

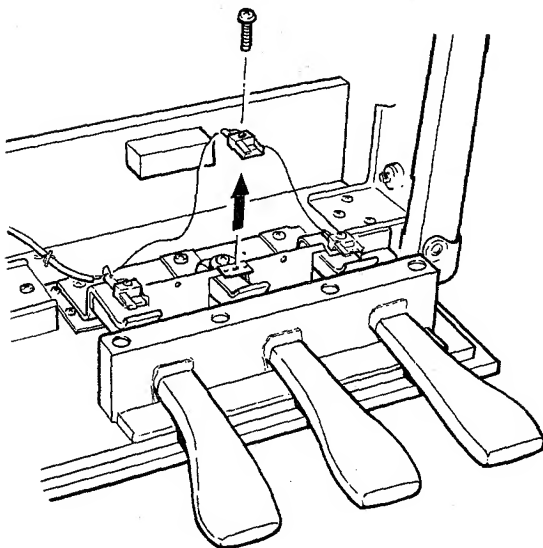


3. Pedal switch removal

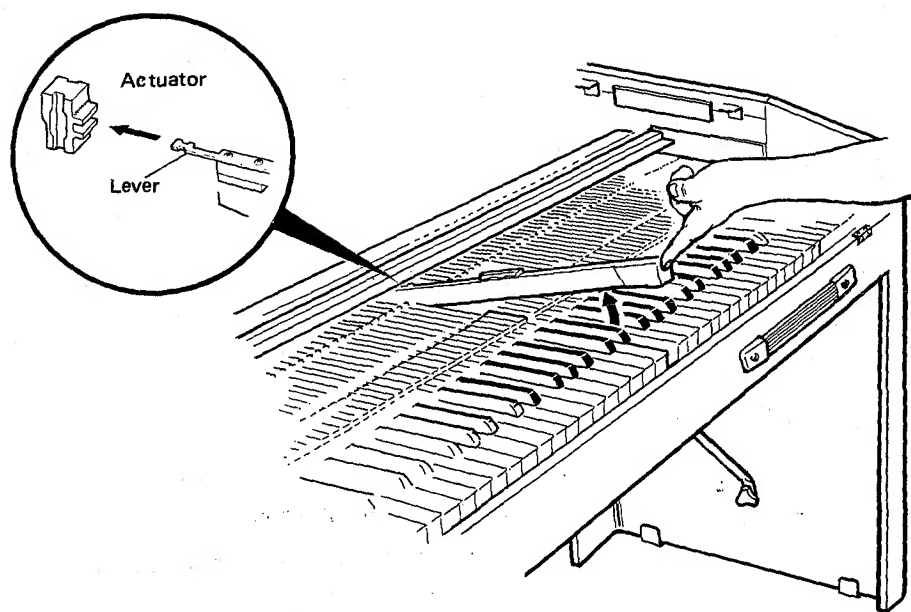
- To remove the pedal cover, remove the four screws on the bottom.

3. ペダルスイッチの外し方

- ペダル下部の止めネジ 4 本をはずす事でペダルカバーを外す事が出来ます。



- To remove the switch, remove the set screw fixing the switch.
- 止めネジを外す事でスイッチを取り出す事が出来ます。



4. Key removal

- To remove a key, lift its end as illustrated and pull it toward you.
- When replacing the key, fit the lever to the depression of the actuator.

4. 鍵盤の外し方

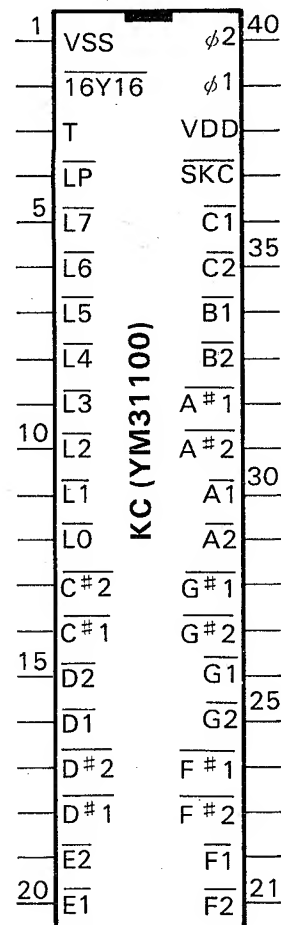
- 図の様に鍵盤の手前側を持ち上げて手前に引き出せば鍵盤を外すことができます。
- 鍵盤をもとにもどす時には、レバーがアクチュエータの凹部に入るように位置を合わせて下さい。

LSI PIN FUNCTION

Part Name	Name	Function	Q'ty	
			GS1	GS2
YM31100	KC	Key Coder	1	1
YM31200	CP	Channel Prossesor	1	1
YM34400	PG	Phase Generator	8	4
YM34501	OPC	Operator-Carrier	4	2
YM34502	OPM	Operator-Modulator	4	2
YM34700	VRG	Voice Register	8	4
YM32100	EG	Envelope Generator	8	4
YM32200	EC	Envelope Controller	8	4
YM31800	MPX	Multiplexer	4	0
YM32000	IG	Initial touch Generator	1	1
YM33400	AG	After touch Generator	1	0
YM31600	ACC	Accumulator	4	2
YM32700	ADD	Adder	2	1

Part Name	YM31100	Function	KC (Key Coder)
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Terminal		Description	Terminal		Description
Pin No.	Name		Pin No.	Name	
1	VSS	Ground(OV)	40	$\phi 2$	Master clock(1MHz) IN
2	16Y16	16 time slot synchro data: {←CP} IN	39	$\phi 1$	—do.— (opposite phase of $\phi 2$)
3	T	Test Pin IN	38	VDD	—12V DC supply IN
4	LP	Damp data {←Damp Pedal} IN	37	SKC	Serial Key Code data {→OUT} {→CP}
5	L7	(C ₆ [#] ~ C ₇)	36	C1	1st contact } C
6	L6	(C ₅ [#] ~ C ₆)	35	C2	2nd contact }
7	L5	(C ₄ [#] ~ C ₅)	34	B1	1st contact } B
8	L4	(C ₃ [#] ~ C ₄)	33	B2	2nd contact }
9	L3	(C ₂ [#] ~ C ₃)	32	A#1	1st contact } A#
10	L2	(C ₁ [#] ~ C ₂)	31	A#2	2nd contact }
11	L1	(C ₀ [#] ~ C ₁)	30	A1	1st contact } A
12	L0	(C ₋₁ [#] ~ C ₀)	29	A2	2nd contact }
13	C#2	2nd contact } C#	28	G#1	1st contact } G#
14	C#1	1st contact }	27	G#2	2nd contact }
15	D2	2nd contact } D	26	G1	1st contact } G
16	D1	1st contact }	25	G2	2nd contact }
17	D#2	2nd contact } D#	24	F#1	1st contact } F#
18	D#1	1st contact }	23	F#2	2nd contact }
19	E2	2nd contact } E	22	F1	1st contact } F
20	E1	1st contact }	21	F2	2nd contact }



Part Name	YM31200	Function	CP (Channel Prossesor)
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Terminal		Description	Terminal		Description
Pin.No.	Name		Pin.No.	Name	
1	VSS	Ground(0V)	40	$\phi 2$	Master clock(1MHz) IN
2	\overline{IC}	Initial clear IN	39	$\phi 1$	do. (opposite phase of $\phi 2$)
3	NC		38	VDD	-12V DC supply IN
4	NC		37	\overline{SKC}	Serial Key Code data(9 μ s \times 16) OUT
5	NC		36	$\overline{N1}$	Parallel Key Code data (1 μ s \times 16) OUT (\rightarrow PG)
6	NC		35	$\overline{N2}$	
7	\overline{KC}	Serial Key Code data IN (\leftarrow KC)	34	$\overline{N3}$	
8	$\overline{E7}$	Envelope Counter IN (\leftarrow EC)	33	$\overline{N4}$	
9	$\overline{E8}$		32	$\overline{B1}$	
10	$\overline{E9}$		31	$\overline{B2}$	
11	$\overline{E10}$		30	$\overline{B3}$	
12	\overline{EE}	Empty channel Detection	29	$\overline{K1}$	Keyboard data
13	\overline{YY}	Test Pin	28	$\overline{K2}$	
14	$\overline{16Y16}$	16 time slot synchro data OUT	27	$\overline{A1}$	Test Pin
15	$\overline{9Y9}$	9 time slot synchro data OUT	26	$\overline{NN3}$	Key Code data for Scaling (3 μ s \times 16) (\rightarrow VRG)
16	ϕB	Master clock($\phi 1$ 3) OUT	25	$\overline{NN4}$	
17	ϕA	do. (opposite phase to ϕB)	24	$\overline{BB1}$	
18	\overline{SCH}	Not Used	23	$\overline{BB2}$	Block data
19	\overline{DP}	Damp data OUT	22	$\overline{BB3}$	
20	$\overline{D1}$	Decay Data OUT (Key OFF \rightarrow Decay finish)	21	$\overline{A2}$	Channel occupation data OUT

1	VSS	$\phi 2$	40
	\overline{IC}	$\phi 1$	
	NC	VDD	
	NC	\overline{SKC}	
5	NC	$\overline{N1}$	
	NC	$\overline{N2}$	35
	\overline{KC}	$\overline{N3}$	
	$\overline{E7}$	$\overline{N4}$	
	$\overline{E8}$	$\overline{B1}$	
10	$\overline{E9}$	$\overline{B2}$	
	$\overline{E10}$	$\overline{B3}$	30
	\overline{EE}	$\overline{K1}$	
	\overline{YY}	$\overline{K2}$	
	$\overline{16Y16}$	$\overline{A1}$	
15	$\overline{9Y9}$	$\overline{NN3}$	25
	ϕB	$\overline{NN4}$	
	ϕA	$\overline{BB1}$	
	\overline{SCH}	$\overline{BB2}$	
	\overline{DP}	$\overline{BB3}$	
20	$\overline{D1}$	$\overline{A2}$	21

Part Name	YM34400	Function	PG (Phase Generator)
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Terminal		Description	Terminal		Description
Pin No.	Name		Pin No.	Name	
1	VSS	Ground(0V)	48	$\phi 2$	Master clock(1MHz) IN
2	$\overline{9Y9}$	9 time slot synchro data [$\leftarrow CP$] IN	47	$\phi 1$	do. (opposite phase of $\phi 2$)
3	A2	Channel occupation data [$\leftarrow CP$] IN	46	VDD	-12V DC Supply IN
4	$\overline{FN0}$	Frequency Control data [$\leftarrow VRG$] IN	45	$\overline{T0}$	Test Pin
5	$\overline{FN1}$		44	$\overline{W1}$	Phase data OUT ω_{ct} [$\rightarrow OPC$] ω_{mt} [$\rightarrow OPM$]
6	$\overline{FN2}$		43	$\overline{W2}$	
7	$\overline{FN3}$		42	$\overline{W3}$	
8	$\overline{FN4}$		41	$\overline{W4}$	
9	$\overline{P1}$	Pitch Control data IN	40	$\overline{W5}$	
10	$\overline{P2}$		39	$\overline{W6}$	
11	$\overline{P3}$		38	$\overline{W7}$	
12	$\overline{P4}$		37	$\overline{W8}$	
13	$\overline{P5}$		36	$\overline{W9}$	
14	$\overline{P6}$		35	$\overline{W10}$	
15	$\overline{P7}$		34	$\overline{W11}$	
16	N1	Note data	33	$\overline{W12}$	
17	N2	Note data	32	$\overline{Y0}$	Synchro data(16 time slot) OUT
18	N3	Note data	31	$\overline{Y1}$	Synchro data(16 time slot) IN
19	N4	Note data	30	FR2	Random tune data IN
20	B1	Block data	29	FR1	Random tune data IN
21	B2	Block data	28	FD6	Detune data IN [$\leftarrow VRG$]
22	B3	Block data	27	FD5	
23	FD1	Detune data IN [$\leftarrow VRG$]	26	FD4	
24	FD2		25	FD3	

1	VSS	$\phi 2$	48
	$\overline{9Y9}$	$\phi 1$	
	A2	VDD	
	$\overline{FN0}$	$\overline{T0}$	45
5	$\overline{FN1}$	$\overline{W1}$	
	$\overline{FN2}$	$\overline{W2}$	
	$\overline{FN3}$	$\overline{W3}$	
	$\overline{FN4}$	$\overline{W4}$	
	$\overline{P1}$	$\overline{W5}$	40
10	$\overline{P2}$	$\overline{W6}$	
	$\overline{P3}$	$\overline{W7}$	
	$\overline{P4}$	$\overline{W8}$	
	$\overline{P5}$	$\overline{W9}$	
	$\overline{P6}$	$\overline{W10}$	35
15	$\overline{P7}$	$\overline{W11}$	
	N1	$\overline{W12}$	
	N2	$\overline{Y0}$	
	N3	$\overline{Y1}$	30
	N4	FR2	
20	B1	FR1	
	B2	FD6	
	B3	FD5	
	FD1	FD4	
24	FD2	FD3	25

Part Name	YM34501	Function	OPC (Operator-Carrier)
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Terminal		Description	Terminal		Description
Pin.No.	Name		Pin.No.	Name	
1	VSS	Ground(OV)	48	$\phi 2$	Master clock(1MHz) IN
2	$\overline{M1}$	Modulation data IN (\leftarrow OPM) $I(t)\sin \omega mt$	47	$\phi 1$	--do. --(opposite phase of $\phi 2$)
3	$\overline{M2}$		46	VDD	-12V DC Supply IN
4	$\overline{M3}$		45	$\overline{A1}$	Sound source waveform data OUT (\rightarrow ACC) $A(t)\sin \{\omega ct + I(t)\sin \omega mt\}$
5	$\overline{M4}$		44	$\overline{A2}$	
6	$\overline{M5}$		43	$\overline{A3}$	
7	$\overline{M6}$		42	$\overline{A4}$	
8	$\overline{M7}$		41	$\overline{A5}$	
9	$\overline{M8}$		40	$\overline{A6}$	
10	$\overline{M9}$		39	$\overline{A7}$	
11	$\overline{M10}$		38	$\overline{A8}$	
12	$\overline{C1}$	Phase data IN (\leftarrow PG) ωct	37	$\overline{A9}$	
13	$\overline{C2}$		36	$\overline{A10}$	
14	$\overline{C3}$		35	$\overline{A11}$	
15	$\overline{C4}$		34	$\overline{A12}$	
16	$\overline{C5}$		33	$\overline{A13}$	
17	$\overline{C6}$		32	$\overline{A14}$	
18	$\overline{C7}$		31	$\overline{E10}$	Envelope Control data IN for Amplitude (\leftarrow EG) $A(t)$
19	$\overline{C8}$		30	$\overline{E9}$	
20	$\overline{C9}$		29	$\overline{E8}$	
21	$\overline{C10}$		28	$\overline{E7}$	
22	$\overline{E1}$	Envelope Control data IN For Modulation depth (\leftarrow EG) $A(t)$	27	$\overline{E6}$	
23	$\overline{E2}$		26	$\overline{E5}$	
24	$\overline{E3}$		25	$\overline{E4}$	

1	VSS	$\phi 2$	48
	$\overline{M1}$	$\phi 1$	
	$\overline{M2}$	VDD	
	$\overline{M3}$	$\overline{A1}$	45
5	$\overline{M4}$	$\overline{A2}$	
	$\overline{M5}$	$\overline{A3}$	
	$\overline{M6}$	$\overline{A4}$	
	$\overline{M7}$	$\overline{A5}$	
	$\overline{M8}$	$\overline{A6}$	40
10	$\overline{M9}$	$\overline{A7}$	
	$\overline{M10}$	$\overline{A8}$	
	$\overline{C1}$	$\overline{A9}$	
	$\overline{C2}$	$\overline{A10}$	
	$\overline{C3}$	$\overline{A11}$	35
15	$\overline{C4}$	$\overline{A12}$	
	$\overline{C5}$	$\overline{A13}$	
	$\overline{C6}$	$\overline{A14}$	
	$\overline{C7}$	$\overline{E10}$	30
	$\overline{C8}$	$\overline{E9}$	
20	$\overline{C9}$	$\overline{E8}$	
	$\overline{C10}$	$\overline{E7}$	
	$\overline{E1}$	$\overline{E6}$	
	$\overline{E2}$	$\overline{E5}$	
24	$\overline{E3}$	$\overline{E4}$	25

OPC (YM34501)

Part Name	YM34502	Function	OPM (Operator-Modulator)
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Terminal		Description
Pin No.	Name	
1	VSS	Ground(0V)
2	$\overline{M1}$	Modulation data IN [\leftarrow OPM] $I(t)\sin \omega mt$ (for CROSS MODULATION)
3	$\overline{M2}$	
4	$\overline{M3}$	
5	$\overline{M4}$	
6	$\overline{M5}$	
7	$\overline{M6}$	
8	$\overline{M7}$	
9	$\overline{M8}$	
10	$\overline{M9}$	
11	$\overline{M10}$	
12	$\overline{C1}$	Phase data IN [\leftarrow PG] ωmt
13	$\overline{C2}$	
14	$\overline{C3}$	
15	$\overline{C4}$	
16	$\overline{C5}$	
17	$\overline{C6}$	
18	$\overline{C7}$	
19	$\overline{C8}$	
20	$\overline{C9}$	
21	$\overline{C10}$	
22	$\overline{E1}$	Envelope Control data IN For Modulation depth $I(t)$ [\leftarrow EG]
23	$\overline{E2}$	
24	$\overline{E3}$	

Terminal		Description
Pin No.	Name	
48	$\phi 2$	Master clock(1MHz) IN
47	$\phi 1$	—do.— (opposite phase of $\phi 2$)
46	VDD	—12V DC Supply IN
45	$\overline{G1}$	FM mode Selection data IN [\leftarrow VRG]
44	$\overline{G2}$	
43	$\overline{A3}$	Frequency Modulation data OUT [\leftarrow OPC] $I(t)\sin \omega mt$
42	$\overline{A4}$	
41	$\overline{A5}$	
40	$\overline{A6}$	
39	$\overline{A7}$	
38	$\overline{A8}$	
37	$\overline{A9}$	
36	$\overline{A10}$	
35	$\overline{A11}$	
34	$\overline{A12}$	
33	$\overline{A13}$	Envelope Control data IN For Modulation depth $I(t)$ [\leftarrow EG]
32	$\overline{A14}$	
31	$\overline{E10}$	
30	$\overline{E9}$	
29	$\overline{E8}$	
28	$\overline{E7}$	
27	$\overline{E6}$	
26	$\overline{E5}$	
25	$\overline{E4}$	

1	VSS	$\phi 2$	48
	$\overline{M1}$	$\phi 1$	
	$\overline{M2}$	VDD	
	$\overline{M3}$	$\overline{G1}$	45
5	$\overline{M4}$	$\overline{G2}$	
	$\overline{M5}$	$\overline{A3}$	
	$\overline{M6}$	$\overline{A4}$	
	$\overline{M7}$	$\overline{A5}$	
	$\overline{M8}$	$\overline{A6}$	40
10	$\overline{M9}$	$\overline{A7}$	
	$\overline{M10}$	$\overline{A8}$	
	$\overline{C1}$	$\overline{A9}$	
	$\overline{C2}$	$\overline{A10}$	
	$\overline{C3}$	$\overline{A11}$	35
15	$\overline{C4}$	$\overline{A12}$	
	$\overline{C5}$	$\overline{A13}$	
	$\overline{C6}$	$\overline{A14}$	
	$\overline{C7}$	$\overline{E10}$	30
	$\overline{C8}$	$\overline{E9}$	
20	$\overline{C9}$	$\overline{E8}$	
	$\overline{C10}$	$\overline{E7}$	
	$\overline{E1}$	$\overline{E6}$	
	$\overline{E2}$	$\overline{E5}$	
24	$\overline{E3}$	$\overline{E4}$	25

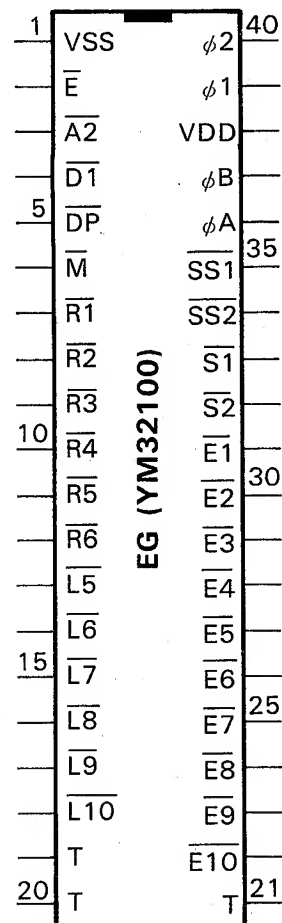
Part Name	YM34700	Function	VRG (Voice Register)
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Terminal		Description	Terminal		Description
Pin No.	Name		Pin No.	Name	
1	VSS	Ground(0V)	48	ϕB	Master clock($\phi 1/3$) IN
2	NN3	Note data	47	ϕA	--do.-- (opposite phase of ϕB)
3	NN4	Note data	46	VDD	--12V DC Supply IN
4	BB1	Block data	45	M	Envelope Mode control (OUT \rightarrow EG)
5	BB2	Block data	44	R1	Rate control data OUT (OUT \rightarrow EG) (Attack, 1st decay, 2nd decay) (Release time)
6	BB3	Block data	43	R2	
		Key Code data (\leftarrow CP) ($3\mu s \times 16$) For scaling	42	R3	
			41	R4	
7	SS1	Envelope State data IN	40	R5	Level control data OUT (OUT \rightarrow EG) (Initial level and 1st decay) (level)
8	SS2	(OUT \rightarrow EG)	39	R6	
9	LOAD	Latch timing data (IN \leftarrow RW)	38	L5	
10	DIN	Serial Tone data(256 μs) IN	37	L6	
11	G2	FM mode select data OUT (OUT \rightarrow OPM)	36	L7	Initial touch response
12	G1		35	L8	
13	FD6	Detune data OUT (OUT \rightarrow PG)	34	L9	
14	FD5		33	L10	
15	FD4		32	ITS1	Sensitivity control data (OUT \rightarrow EC)
16	FD3		31	ITS2	
17	FD2	Frequency Control data OUT (OUT \rightarrow PG)	30	TL4	Total Level control data OUT (OUT \rightarrow EC)
18	FD1		29	TL5	
19	FN4		28	TL6	
20	FN3		27	TL7	
21	FN2	Octave (OUT \rightarrow PG)	26	TL8	
22	FN1		25	TL9	
23	FNO	Total Level control data (OUT \rightarrow EC)			
24	TL10				

1	VSS	ϕB	48
	NN3	ϕA	
	NN4	VDD	
	BB1	M	45
5	BB2	R1	
	BB3	R2	
	SS1	R3	
	SS2	R4	
	LOAD	R5	40
10	DIN	R6	
	G2	L5	
	G1	L6	
	FD6	L7	
	FD5	L8	35
15	FD4	L9	
	FD3	L10	
	FD2	ITS1	
	FD1	ITS2	
	FN4	TL4	30
20	FN3	TL5	
	FN2	TL6	
	FN1	TL7	
	FNO	TL8	
24	TL10	TL9	25

Part Name	YM32100	Function	EG (Envelope Generator)
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Terminal		Description	Terminal		Description
Pin No.	Name		Pin No.	Name	
1	VSS	Ground(OV)	40	$\phi 2$	Master clock(1 MHz) IN
2	\bar{E}	Not Used	39	$\phi 1$	--do.-- (opposite phase of $\phi 2$)
3	$\bar{A}2$	Channel Occupation data $\left[\leftarrow CP \right]$ IN	38	VDD	--12V DC Supply IN
4	$\bar{D}1$	Decay data (Key OFF \rightarrow Decay finish) $\left[\leftarrow CP \right]$ IN	37	ϕB	Master clock($\phi 1 / 3$) IN
5	$\bar{D}P$	Damp data $\left[\leftarrow CP \right]$ IN	36	ϕA	--do.-- (opposite phase of ϕB)
6	\bar{M}	Envelope Mode Control data $\left[\leftarrow VRG \right]$ IN	35	SS1	Envelope State data OUT (At,1D,2D,R) $\left[\rightarrow VRG \right]$
7	$\bar{R}1$	Rate Control data IN $\left[\leftarrow VRG \right]$ (Attack, 1st decay, 2nd decay and Release time)	34	SS2	
8	$\bar{R}2$		33	$\bar{S}1$	Not Used
9	$\bar{R}3$		32	$\bar{S}2$	Not Used
10	$\bar{R}4$		31	$\bar{E}1$	Envelope data OUT $\left[\rightarrow EC \right]$
11	$\bar{R}5$		30	$\bar{E}2$	
12	$\bar{R}6$		29	$\bar{E}3$	
13	$\bar{L}5$	Level Control data IN $\left[\leftarrow VRG \right]$ (Initial level and 1st Decay level)	28	$\bar{E}4$	
14	$\bar{L}6$		27	$\bar{E}5$	
15	$\bar{L}7$		26	$\bar{E}6$	
16	$\bar{L}8$		25	$\bar{E}7$	
17	$\bar{L}9$		24	$\bar{E}8$	
18	$\bar{L}10$		23	$\bar{E}9$	
19	T	Test Pin	22	$\bar{E}10$	
20	T	Test Pin	21	T	Test Pin



Part Name	YM32200	Function	EC (Envelope Controller)
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Terminal Pin No.	Name	Description
1	VSS	Ground(0V)
2	$\overline{E1}$	Envelope data IN ($\leftarrow EG$)
3	$\overline{E2}$	
4	$\overline{E3}$	
5	$\overline{E4}$	
6	$\overline{E5}$	
7	$\overline{E6}$	
8	$\overline{E7}$	
9	$\overline{E8}$	
10	$\overline{E9}$	
11	$\overline{E10}$	
12	$\overline{T1}$	Touch Control data IN ($\leftarrow IG$) ($\leftarrow AG$)
13	$\overline{T2}$	
14	$\overline{T3}$	
15	$\overline{T4}$	
16	$\overline{T5}$	
17	$\overline{T6}$	
18	$\overline{T7}$	
19	$\overline{T8}$	
20	$\overline{T9}$	
21	$\overline{T10}$	
22	$\overline{ITS1}$	Initial touch response
23	$\overline{ITS2}$	Sensitivity Control data IN ($\leftarrow VRG$)
24	$\overline{ATS1}$	After touch response sensitivity Control data IN ($\leftarrow Switch$)

Terminal Pin No.	Name	Description
48	$\phi 2$	Master clock(1MHz) IN
47	$\phi 1$	do. (opposite phase of $\phi 2$)
46	VDD	-12V DC supply IN
45	ϕB	Master clock($\phi 1 \cdot 3$) IN
44	ϕA	do. (opposite phase of ϕB)
43	$\overline{EC1}$	Envelope Control data OUT ($\rightarrow OPC$) ($\rightarrow OPM$)
42	$\overline{EC2}$	
41	$\overline{EC3}$	
40	$\overline{EC4}$	
39	$\overline{EC5}$	
38	$\overline{EC6}$	
37	$\overline{EC7}$	
36	$\overline{EC8}$	
35	$\overline{EC9}$	
34	$\overline{EC10}$	
33	\overline{EE}	Envelope Control data (Empty channel detection) OUT ($\rightarrow CP$)
32	$\overline{TL10}$	Total Level Control data IN ($\leftarrow VRG$)
31	$\overline{TL9}$	
30	$\overline{TL8}$	
29	$\overline{TL7}$	
28	$\overline{TL6}$	
27	$\overline{TL5}$	
26	$\overline{TL4}$	
25	$\overline{ATS2}$	After touch response sensitivity control data IN ($\leftarrow Switch$)

1	VSS	$\phi 2$	48
2	$\overline{E1}$	$\phi 1$	
3	$\overline{E2}$	VDD	
4	$\overline{E3}$	ϕB	45
5	$\overline{E4}$	ϕA	
6	$\overline{E5}$	$\overline{EC1}$	
7	$\overline{E6}$	$\overline{EC2}$	
8	$\overline{E7}$	$\overline{EC3}$	
9	$\overline{E8}$	$\overline{EC4}$	40
10	$\overline{E9}$	$\overline{EC5}$	
11	$\overline{E10}$	$\overline{EC6}$	
12	$\overline{T1}$	$\overline{EC7}$	
13	$\overline{T2}$	$\overline{EC8}$	
14	$\overline{T3}$	$\overline{EC9}$	35
15	$\overline{T4}$	$\overline{EC10}$	
16	$\overline{T5}$	\overline{EE}	
17	$\overline{T6}$	$\overline{TL10}$	
18	$\overline{T7}$	$\overline{TL9}$	
19	$\overline{T8}$	$\overline{TL8}$	30
20	$\overline{T9}$	$\overline{TL7}$	
21	$\overline{T10}$	$\overline{TL6}$	
22	$\overline{ITS1}$	$\overline{TL5}$	
23	$\overline{ITS2}$	$\overline{TL4}$	
24	$\overline{ATS1}$	$\overline{ATS2}$	25

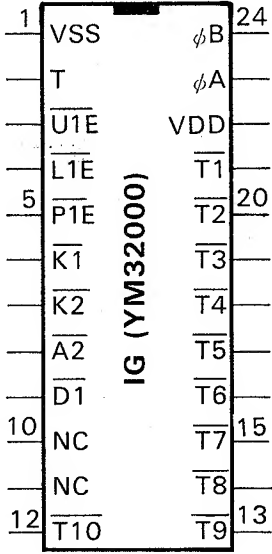
Part Name	YM31800	Function	MPX (Multiplexer)
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Terminal		Description	Terminal		Description
Pin No.	Name		Pin No.	Name	
1	VSS	Ground(0V)	40	$\phi 2$	Master clock(1MHz) IN
2	SKC	Serial Key Code data (9 μ s \times 16) IN (\leftarrow CP)	39	$\phi 1$	—do.— (opposite phase of $\phi 2$)
3	CB1	Block data IN Not Used	38	VDD	—12V DC Supply IN
4	CB2		37	9Y9	9 time slot synchro data IN (\leftarrow CP)
5	CB3		36	NC	—
6	CK1	Keyboard data IN	35	NC	—
7	CK2	Keyboard data IN	34	A0	After touch data OUT (\rightarrow AG)
8	C0	After touch voltage IN (0V \sim —8V)	33	N	After touch voltage IN (0V \sim —8V)
9	C#1		32	C3	
10	D1		31	B2	
11	D#1		30	A#2	
12	E1		29	A2	
13	F1		28	G#2	
14	F#1		27	G2	
15	G1		26	F#2	
16	G#1		25	F2	
17	A1		24	E2	
18	A#1		23	D#2	
19	B1		22	D2	
20	C1		21	C#2	

1	VSS	$\phi 2$	40
—	SKC	$\phi 1$	—
—	CB1	VDD	—
—	CB2	9Y9	—
5	CB3	NC	—
—	CK1	NC	35
—	CK2	A0	—
—	C0	N	—
—	C#1	C3	—
10	D1	B2	—
—	D#1	A#2	30
—	E1	A2	—
—	F1	G#2	—
—	F#1	G2	—
15	G1	F#2	—
—	G#1	F2	25
—	A1	E2	—
—	A#1	D#2	—
—	B1	D2	—
20	C1	C#2	21

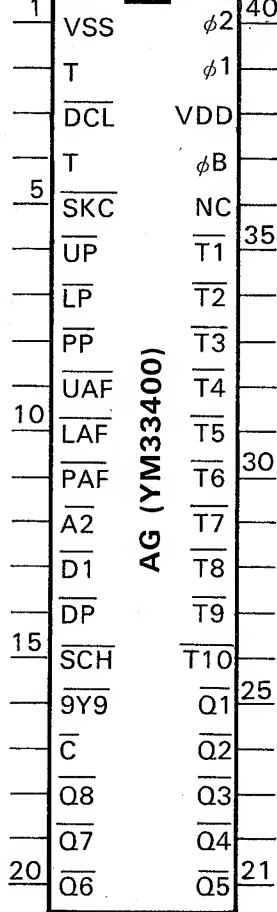
Part Name	YM32000	Function	IG (Initial Touch Generator)
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Terminal Pin No.	Name	Description	Terminal Pin No.	Name	Description
1	VSS	Ground(OV)	24	ϕ B	Master clock IN (\leftarrow CP)
2	T	Test Pin	23	ϕ A	do. (opposite phase of ϕ B)
3	$\overline{U1E}$	UK Enable data IN	22	VDD	-12V DC Supply IN
4	$\overline{L1E}$	LK Enable data IN	21	$\overline{T1}$	Initial Touch data OUT (\rightarrow EC)
5	$\overline{P1E}$	PK Enable data IN	20	$\overline{T2}$	
6	K1	Keyboard data IN (\leftarrow CP)	19	$\overline{T3}$	
7	K2	Keyboard data IN (\leftarrow CP)	18	$\overline{T4}$	
8	A2	Channel occupation data (\leftarrow CP) IN	17	$\overline{T5}$	
9	D1	Decay data (Key OFF \rightarrow Decay finish) (\leftarrow CP) IN	16	$\overline{T6}$	
10	NC		15	$\overline{T7}$	
11	NC		14	$\overline{T8}$	
12	$\overline{T10}$	Initial Touch data OUT	13	$\overline{T9}$	



Part Name	YM33400	Function	AG (After Touch Generator)
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Terminal Pin No.	Name	Description	Terminal Pin No.	Name	Description
1	VSS	Ground(OV)	40	ϕ 2	Master clock IN
2	T	Test Pin	39	ϕ 1	do. (opposite phase of ϕ 2)
3	\overline{DCL}	Clock for Test	38	VDD	-12V DC Supply IN
4	T	Test Pin	37	ϕ B	Master clock(ϕ 1/3) IN
5	\overline{SKC}	Serial Key Code data (9,15 \times 16) (\leftarrow CP) IN	36	NC	
6	\overline{UP}	Damper Data(U) IN	35	$\overline{T1}$	After Touch data OUT
7	\overline{LP}	Damper Data(L) IN	34	$\overline{T2}$	
8	\overline{PP}	Damper Data(P) IN	33	$\overline{T3}$	
9	\overline{UAF}	*Keyboard Selection data(U) IN	32	$\overline{T4}$	
10	\overline{LAF}	Keyboard Selection data(L) IN	31	$\overline{T5}$	
11	\overline{PAF}	Keyboard Selection data(P) IN	30	$\overline{T6}$	
12	A2	Channel occupation data (\leftarrow CP) IN	29	$\overline{T7}$	
13	D1	Decay data (Key OFF \rightarrow Decay finish) (\leftarrow CP) IN	28	$\overline{T8}$	
14	\overline{DP}	Decay finish data (\leftarrow CP) IN	27	$\overline{T9}$	Counter output for A-D Conversion OUT
15	\overline{SCH}	Not Used	26	$\overline{T10}$	
16	$\overline{9Y9}$	9 time slot synchro data (\leftarrow CP) IN	25	$\overline{Q1}$	
17	\overline{C}	After touch data(Serial) IN	24	$\overline{Q2}$	
18	$\overline{Q8}$	Counter Output for A-D Conversion OUT	23	$\overline{Q3}$	
19	$\overline{Q7}$		22	$\overline{Q4}$	
20	$\overline{Q6}$		21	$\overline{Q5}$	



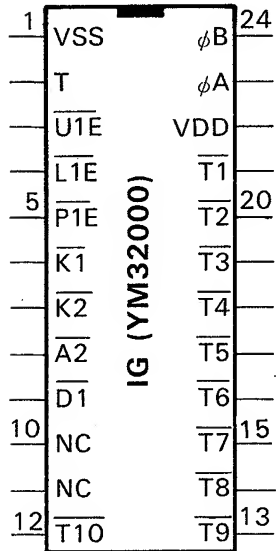
Part Name	
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Terminal Pin No.	Name	Description
1	VSS	Ground(OV)
2	16Y16	16 time slot s
3	K1	Keyboard
4	K2	Keyboard
5	A1	Sound s data
6	A2	
7	A3	
8	A4	
9	A5	
10	A6	
11	A7	
12	A8	

Part Name	
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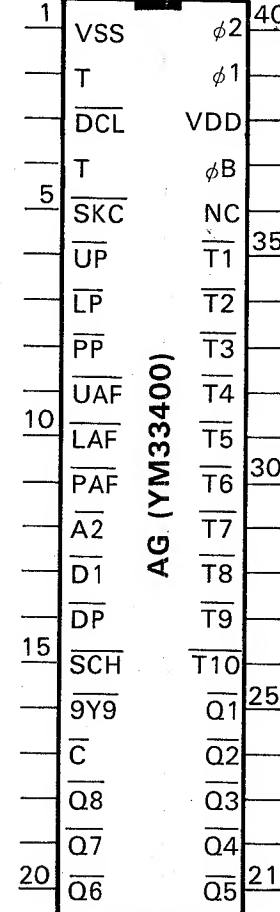
Terminal Pin No.	Name	Description
1	VSS	Ground(C
2	16Y16	16 time slot s
3	IN1	Serial sound s
4	IN2	Serial sound s
5	M	Not Usec
6	S3	Multipl
7	S2	
8	S1	
9	B11	Digital Anak
10	B10	
11	B9	
12	B8	

ch Generator)



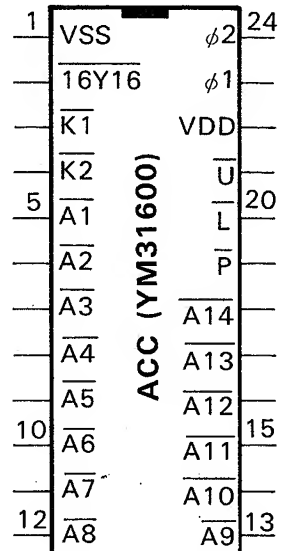
Part Name	YM33400	Function	AG (After Touch Generator)
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Terminal	Description	Terminal	Description
Pin No.	Name	Pin No.	Name
1	VSS	40	$\phi 2$ Master clock IN
2	T	39	$\phi 1$ —do.— (opposite phase of $\phi 2$)
3	DCL	38	VDD —12V DC Supply IN
4	T	37	ϕB Master clock($\phi 1/3$) IN
5	SKC	36	NC
6	UP	35	T1
7	LP	34	T2
8	PP	33	T3
9	UAF	32	T4
10	LAF	31	T5
11	PAF	30	T6
12	A2	29	T7
13	D1	28	T8
14	DP	27	T9
15	SCH	26	T10
16	9Y9	25	Q1
17	C	24	Q2
18	Q8	23	Q3
19	Q7	22	Q4
20	Q6	21	Q5



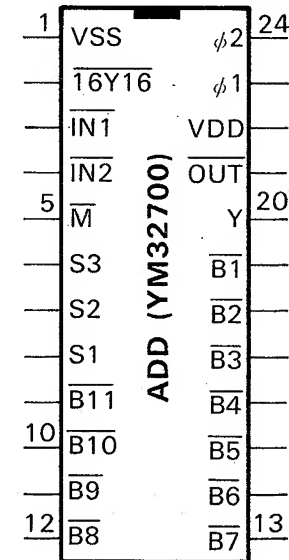
Part Name	YM31600	Function	ACC (Accumulator)
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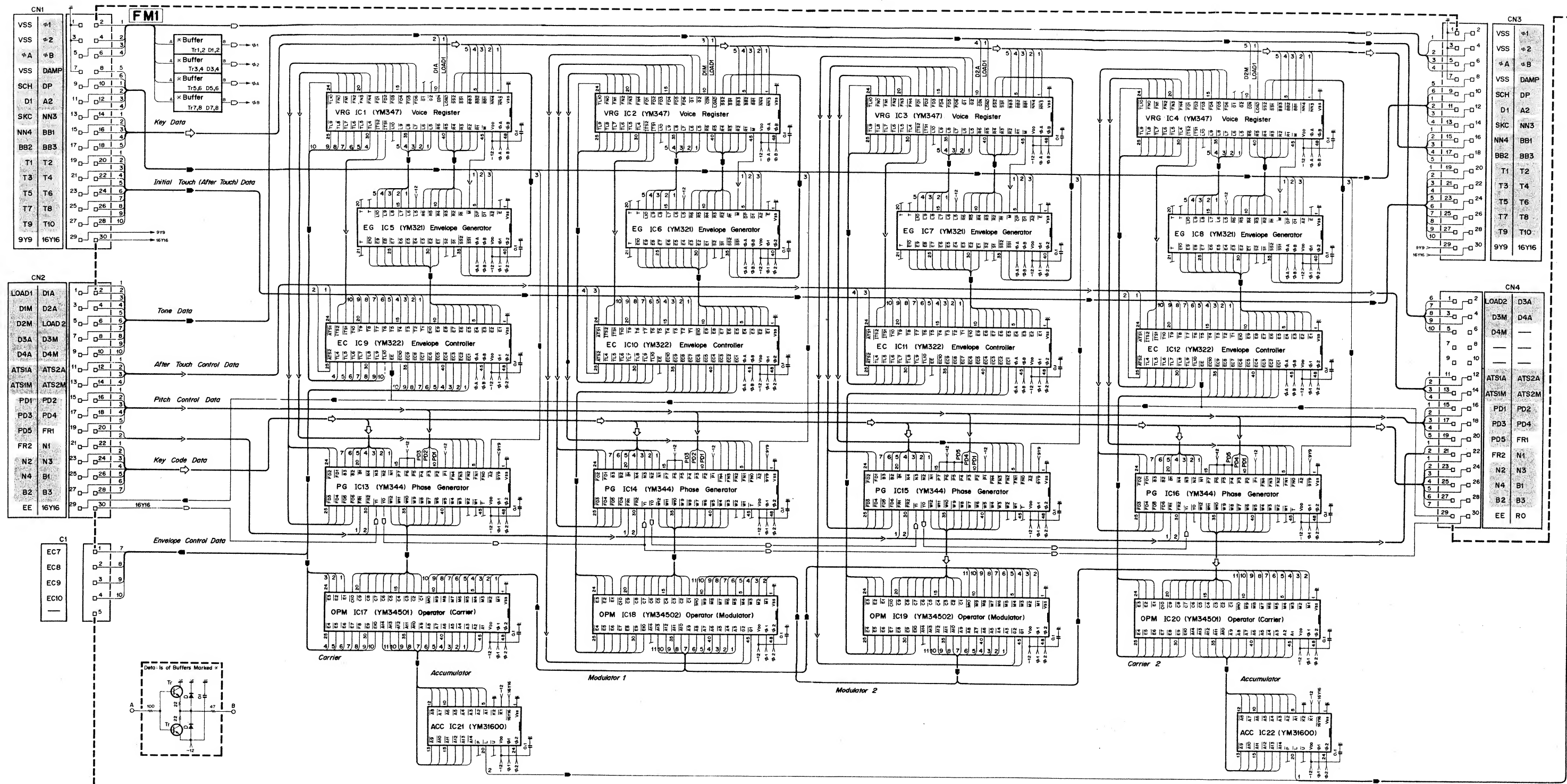
Terminal	Description	Terminal	Description
Pin No.	Name	Pin No.	Name
1	VSS	24	$\phi 2$ Master clock(1MHz) IN
2	16Y16	23	$\phi 1$ —do.— (opposite phase of $\phi 2$)
3	K1	22	VDD —12V DC Supply IN
4	K2	21	U
5	A1	20	L
6	A2	19	P
7	A3	18	A14
8	A4	17	A13
9	A5	16	A12
10	A6	15	A11
11	A7	14	A10
12	A8	13	A9



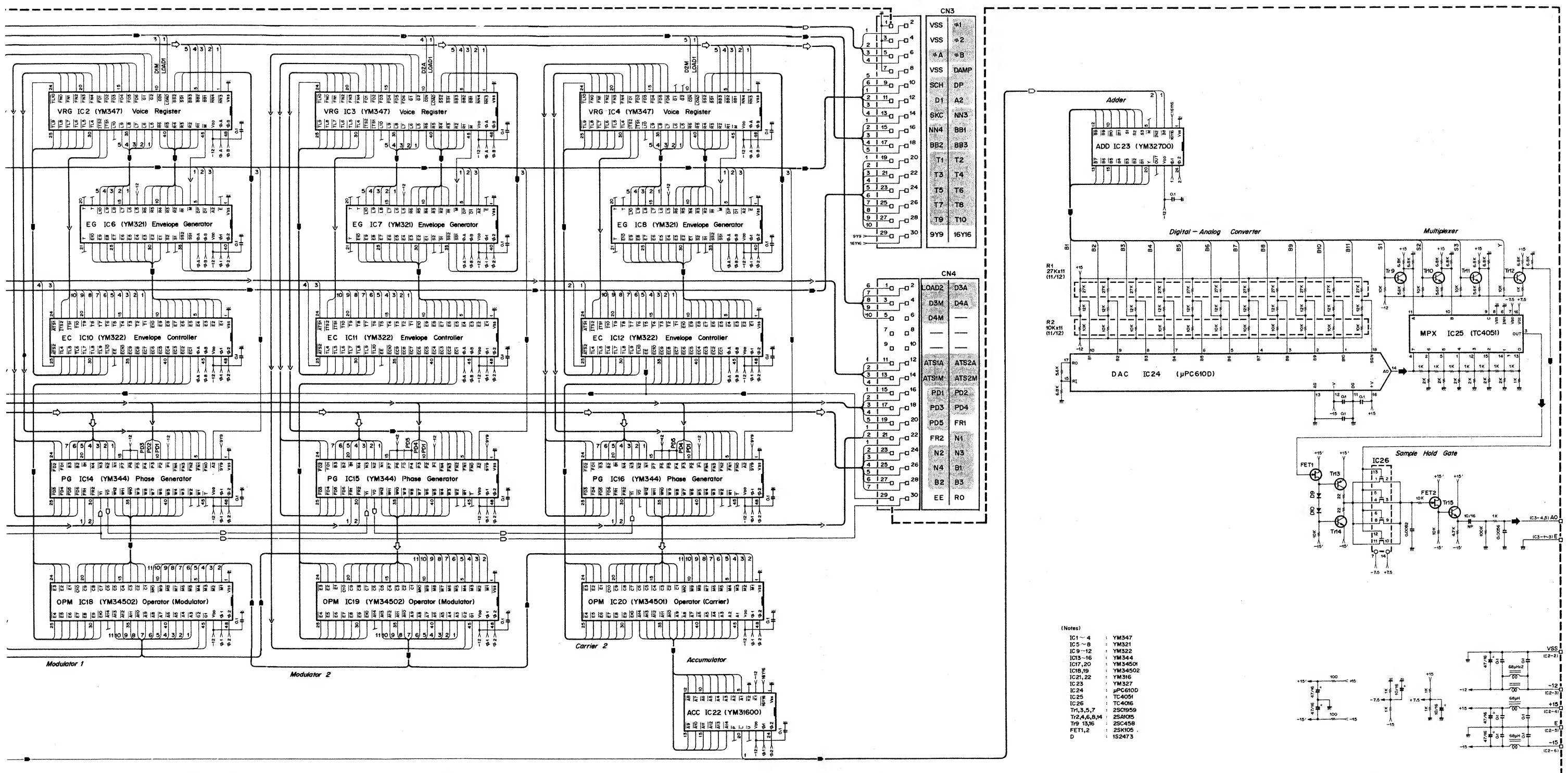
Part Name	YM32700	Function	ADD (Adder)
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Terminal	Description	Terminal	Description
Pin No.	Name	Pin No.	Name
1	VSS	24	$\phi 2$ Master clock(1MHz) IN
2	16Y16	23	$\phi 1$ do. (opposite phase of $\phi 2$)
3	IN1	22	VDD —12V DC Supply IN
4	IN2	21	OUT
5	M	20	Y
6	S3	19	B1
7	S2	18	B2
8	S1	17	B3
9	B11	16	B4
10	B10	15	B5
11	B9	14	B6
12	B8	13	B7





FM Circuit Diagram



C1

Pin No.	Pin Name	Wire Color	Destination
1	E7	BR	KC-E7 (C8-5)
2	E8	RE	KC-E8 (C8-4)
3	E9	OR	KC-E9 (C8-3)
4	E10	YE	KC-E10 (C8-2)
5			

C2

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	Vss	BL	DC-Vss (C6-2)
3	-12	BE	DC- -12 (C6-3)
4	+15	OR	DC+15 (C6-6)
5	E	BL	DC-E (C6-5)
6	-15	BR	DC- -15 (C6-4)

C3

Pin No.	Pin Name	Wire Color	Destination
1	E	—	—
2	E	—	—
3	E	S GR S	A-E (C8-4)
4	AO	S GR	A-A11 (C8-5)
5	AO	—	—

C2

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	Vss	BL	DC-Vss (C5-2)
3	—12	BE	DC- —12 (C5-3)
4	+15	OR	DC+15 (C5-6)
5	E	BL	DC-E (C5-5)
6	—15	BR	DC- —15 (C5-4)

C3

Pin No.	Pin Name	Wire Color	Destination
1	E	—	—
2	E	—	—
3	E	S B E S	A-E (C8-2)
4	AO	S B E	A-A12 (C8-1)
5	AO	—	—

5	
4	E10
3	E9
2	E8
1	E7

45

GS1

Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	DET-Vss (C1-3)
2	V1B	RE	A-PCO (C7-2)
3	IC	OR	A-IC (C5-2)
4			
5			

Pin No.	Pin Name	Wire Color	Destination
1	φ2	—	—
2	16Y16	—	—
3	SCH	—	—
4	KCO	—	—
5	KCI	—	—
6	-12	—	—

Pin No.	Pin Name	Wire Color	Destination
1	PS1	—	—
2	PS2	RE	TET-TRS (C1-3)
3	DP1	OR	DET-SD1 (C1-2)
4	DP2	—	—
5	DP3	GR	DET-SD2 (C1-1)
6	RP1	BE	DET-RD1 (C1-4)
7	RP2	VI	DET-RD2 (C1-6)
8	RP3	—	—
9	DAMP	WH	CNB-DAMP (C6-8)
10			

Pin No.	Pin Name	Wire Color	Destination
1	L7	S GR	MK2-L7 (C4-2)
2	L6	S RE	MK2-L6 (C4-4)
3	L5	S OR	MK2-L5 (C4-6)
4	L4	S YE	MK2-L4 (C1-8)
5	L3	S GR	MK1-L3 (C6-2)
6	L2	S BE	MK1-L2 (C6-4)
7	L1	S VI	MK1-L1 (C1-1)
8	L0	S GY	MK1-L0 (C1-4)

Pin No.	Pin Name	Wire Color	Destination
1	C#2	S BR	MK1-C#2 (C2-12)
2	C#1	S RE	MK1-C#1 (C2-8)
3	D2	S OR	MK1-D2 (C2-8)
4	D1	S YE	MK1-D1 (C2-5)
5	D#2	S GR	MK1-D#2 (C2-4)
6	D#1	S BE	MK1-D#1 (C2-1)
7	E2	S VI	MK1-E2 (C3-12)
8	E1	S GY	MK1-E1 (C3-9)
9	F2	S WH	MK1-F2 (C3-8)
10	F1	S GG	MK1-F1 (C3-5)
11	F#2	S SB	MK1-F#2 (C3-4)
12	F#1	S PK	MK1-F#1 (C3-1)

Pin No.	Pin Name	Wire Color	Destination
1	G2	S BR	MK1-G2 (C4-12)
2	G1	S RE	MK1-G1 (C4-9)
3	G#2	S OR	MK1-G#2 (C4-8)
4	G#1	S YE	MK1-G#1 (C4-5)
5	A2	S GR	MK1-A2 (C4-4)
6	A1	S BE	MK1-A1 (C4-1)
7	A#2	S VI	MK1-A#2 (C5-12)
8	A#1	S GY	MK1-A#1 (C5-9)
9	B2	S WH	MK1-B2 (C5-8)
10	B1	S GG	MK1-B1 (C5-5)
11	C2	S SB	MK1-C2 (C5-4)
12	C4	S PK	MK1-C1 (C5-1)

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	DC-7 (C7-1)
2	Vss	BL	DC-Vss (C7-2)
3	-12	BE	DC-12 (C7-3)
4	—	—	—
5	E	BL	DC-E (C7-5)
6	+15	OR	DC-15 (C7-6)

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	E10	YE	FM1-E10 (C1-4)
3	E9	OR	FM1-E9 (C1-3)
4	E8	RE	FM1-E8 (C1-2)
5	E7	BR	FM1-E7 (C1-1)

GS2

Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	EFF-Vss (C2-1)
2	V1B	RE	A-PCO (C7-2)
3	IC	OR	A-IC (C5-2)
4	—	—	—
5	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	φ2	—	—
2	16Y16	—	—
3	SCH	—	—
4	KCO	—	—
5	KCI	—	—
6	-12	—	—

Pin No.	Pin Name	Wire Color	Destination
1	PS1	—	—
2	PS2	—	—
3	DP1	OR	EFF-DP1 (C2-2)
4	DP2	—	—
5	DP3	GR	EFF-DP3 (C2-3)
6	RP1	—	—
7	RP2	—	—
8	RP3	—	—
9	DAMP	WH	FC-P1-6 F/S4P-2
10	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	L7	S BR	MK3-L7 (C4-2)
2	L6	S RE	MK3-L6 (C4-4)
3	L5	S OR	MK3-L5 (C4-6)
4	L4	S YE	MK3-L4 (C4-8)
5	L3	S GR	MK4-L3 (C6-2)
6	L2	S BE	MK4-L2 (C6-4)
7	L1	S VI	MK4-L1 (C1-1)
8	L0	—	—

Pin No.	Pin Name	Wire Color	Destination
1	C#2	S BR	MK4-C#2 (C2-12)
2	C#1	S RE	MK4-C#1 (C2-8)
3	D2	S OR	MK4-D2 (C2-8)
4	D1	S YE	MK4-D1 (C2-5)
5	D#2	S GR	MK4-D#2 (C2-4)
6	D#1	S BE	MK4-D#1 (C2-1)
7	E2	S VI	MK4-E2 (C3-12)
8	E1	S GY	MK4-E1 (C3-9)
9	F2	S WH	MK4-F2 (C3-8)
10	F1	S GG	MK4-F1 (C3-5)
11	F#2	S SB	MK4-F#2 (C3-4)
12	F#1	S PK	MK4-F#1 (C3-1)

Pin No.	Pin Name	Wire Color	Destination
1	G2	S BR	MK4-G2 (C4-12)
2	G1	S RE	MK4-G1 (C4-9)
3	G#2	S OR	MK4-G#2 (C4-8)
4	G#1	S YE	MK4-G#1 (C4-5)
5	A2	S GR	MK4-A2 (C4-4)
6	A1	S BE	MK4-A1 (C4-1)
7	A#2	S VI	MK4-A#2 (C5-12)
8	A#1	S GY	MK4-A#1 (C5-9)
9	B2	S WH	MK4-B2 (C5-8)
10	B1	S GG	MK4-B1 (C5-5)
11	C2	S SB	MK4-C2 (C5-4)
12	C1	S PK	MK4-C1 (C5-1)

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	DC-7 (C6-1)
2	Vss	BL	DC-Vss (C6-2)
3	-12	BE	DC-12 (C6-3)
4	—	—	—
5	E	BL	DC-E (C6-5)
6	+15	OR	DC-15 (C6-6)

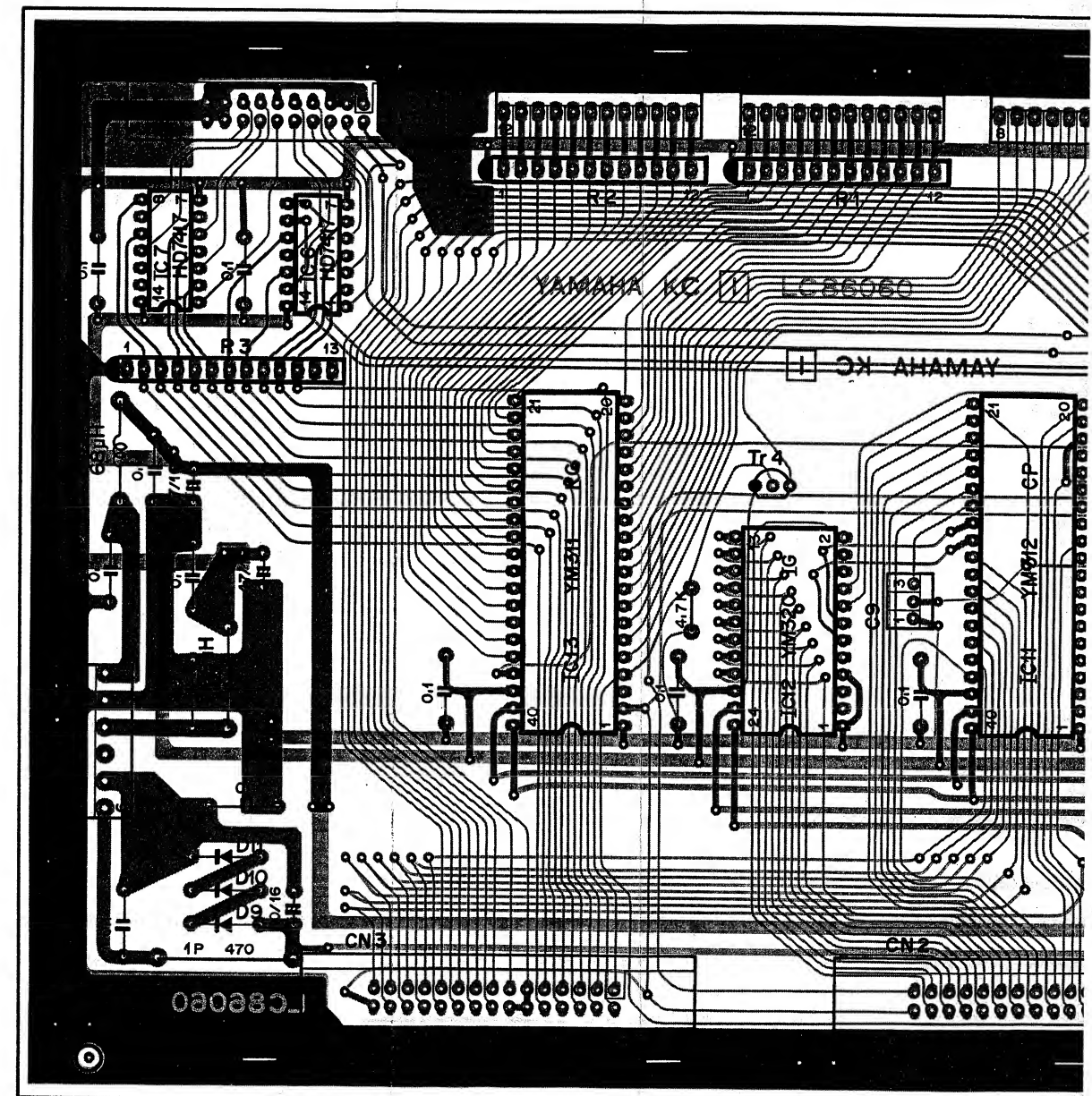
Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	E10	YE	FM-E10 (C1-4)
3	E9	OR	FM-E9 (C1-3)
4	E8	RE	FM-E8 (C1-2)
5	E7	BR	FM-E7 (C1-1)

CN No.	CN Name	Destination
CN1	20P FLAT CABLE	(to RW-CN6)
CN2	30P FLAT CABLE	(to FM-CN1)
CN3	30P FLAT CABLE	(to FM-CN2)

(Notes)

- Circuit Board : LC86060
- Transistors
Tr1 ~ 3 : 2SC752 (O, Y)
Tr4 : 2SC458 (C, D)
- IC
IC1, 2 : HD7400
IC4 : TC4009UBP
IC5 : HD7404P
IC6, 7 : HD7417P
IC8, 9 : SN75366N
IC11 : YM312
IC12 : YM320
IC13 : YM311
- Diodes
D1 ~ 8 : 1S2473VE
D9 ~ 11 : 10E-1
- Resistor
R1, 2 : Resistor 470K x 12
R3 : Resistor 4.7K x 12
R4 : Resistor 100K x 10
- Connector
C1, 8 : NH Connector 5P (T, E)
C3 : NH Connector 10P (T, E)
C4 : NH Connector 8P (T, E)
C5, 6 : NH Connector 12P (T, E)
C7 : Connector 6P (T, E) 3.96 mm
C8 : NH Connector 3P (T, E)
CN1 : Flat cable connector 20P (T, E)
CN2, 3 : Flat cable connector 30P (T, E)

Pin No.	Pin Name	Wire Color	Destination
1	φ2	—	—
2	16Y16	—	—
3	SCH	—	—
4	KCO	—	—
5	KCI	—	—
6	-12	—	—



View from the component side of the circuit board

C4

C4

CN No.	CN Name	Destination
CN1	20P FLAT CABLE	(to RW-CN6)
CN2	30P FLAT CABLE	(to FM-CN1)
CN3	30P FLAT CABLE	(to FM-CN2)

-7	1
Vss	2
-12	3
-	4
E	5
+15	6

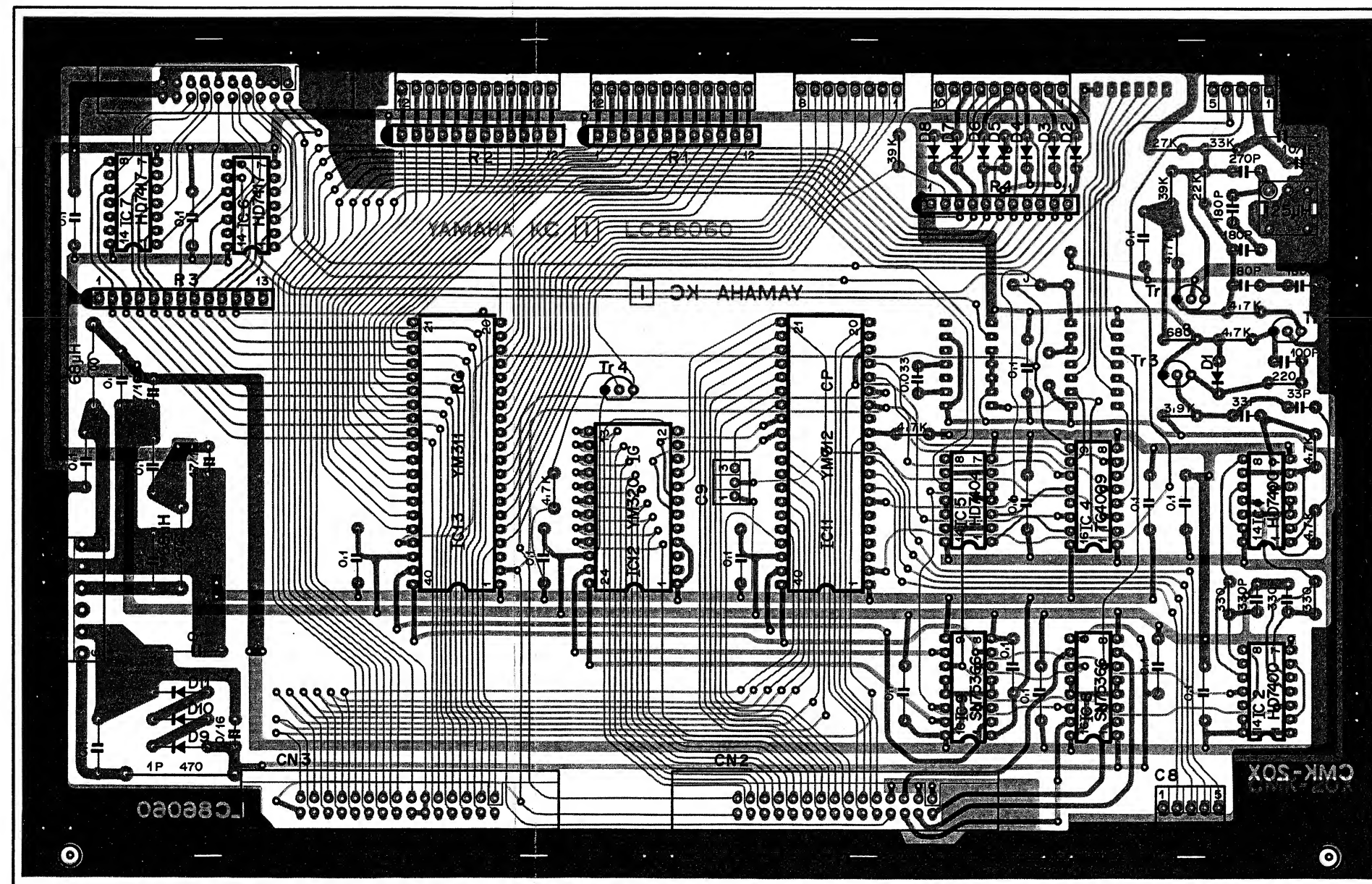
12	C4
11	C2
10	B1
9	B2
8	A#1
7	A#2
6	A1
5	A2
4	G#1
3	G#2
2	G1
1	C3

C5	12	F#1
	11	F#2
	10	F1
	9	F2
	8	E1
	7	E2
	6	D#1
	5	D#2
	4	D1
	3	D2
	2	C#1
	1	C#2

8	L0
7	L1
6	L2
5	L3
4	L4
3	L5
2	L6
1	L7

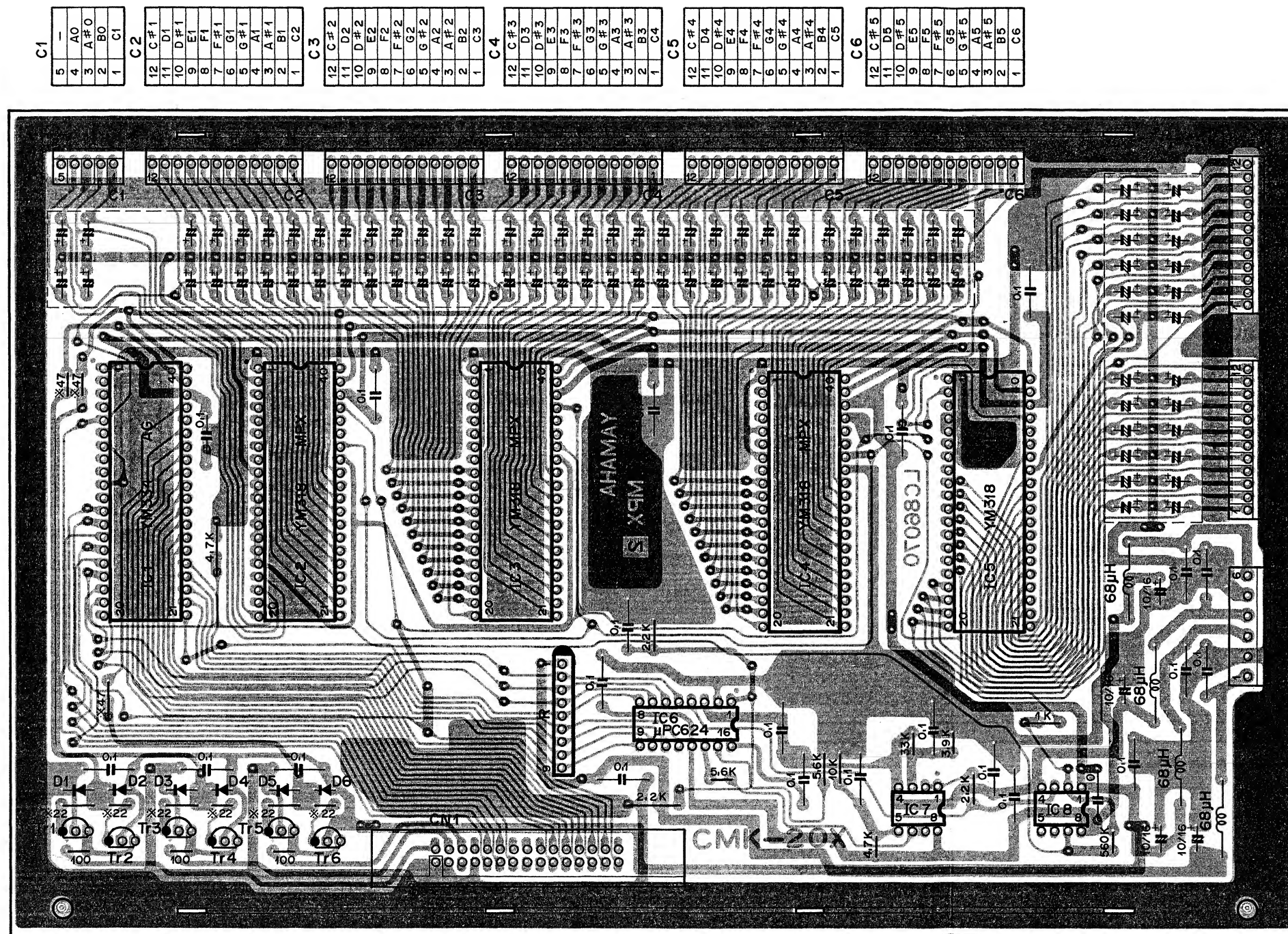
10	
9	DAMP
8	RP3
7	RP2
6	RP1
5	DP3
4	DP2
3	DP1
2	PS2
1	PS1

5	
4	
3	IC
2	VIB



View from the component side of the circuit board

C8	1
-	2
E10	3
E9	4
E8	



View from the component side of the circuit board

C1			
Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	PCB-C (C1-4)
2	B0	PK	PCB-B (C1-3)
3	A#0	SB	PCB-A# (C1-2)
4	A0	GG	PCB-A (C1-1)
5	-	-	-

C2			
Pin No.	Pin Name	Wire Color	Destination
1	C2	BR	PCA1-C (C3-5)
2	B1	PK	PCA1-B (C3-4)
3	A#1	SB	PCA1-A# (C3-3)
4	A1	GG	PCA1-A (C3-2)
5	G#1	WH	PCA1-G# (C3-1)
6	G1	GY	PCA1-G (C1-7)
7	F#1	VI	PCA1-F# (C1-6)
8	F1	BE	PCA1-F (C1-5)
9	E1	GR	PCA1-E (C1-4)
10	D#1	YE	PCA1-D# (C1-3)
11	D1	OR	PCA1-D (C1-2)
12	C#1	RE	PCA1-C# (C1-1)

C3			
Pin No.	Pin Name	Wire Color	Destination
1	C3	BR	PCA2-C (C3-5)
2	B2	PK	PCA2-B (C3-4)
3	A#2	SB	PCA2-A# (C3-3)
4	A2	GG	PCA2-A (C3-2)
5	G#2	WH	PCA2-G# (C3-1)
6	G2	GY	PCA2-G (C1-7)
7	F#2	VI	PCA2-F# (C1-6)
8	F2	BE	PCA2-F (C1-5)
9	E2	GR	PCA2-E (C1-4)
10	D#2	YE	PCA2-D# (C1-3)
11	D2	OR	PCA2-D (C1-2)
12	C#2	RE	PCA2-C# (C1-1)

C4			
Pin No.	Pin Name	Wire Color	Destination
1	C4	BR	PCA3-C (C3-5)
2	B3	PK	PCA3-B (C3-4)
3	A#3	SB	PCA3-A# (C3-3)
4	A3	GG	PCA3-A (C3-2)
5	G#3	WH	PCA3-G# (C3-1)
6	G3	GY	PCA3-G (C1-7)
7	F#3	VI	PCA3-F# (C1-6)
8	F3	BE	PCA3-F (C1-5)
9	E3	GR	PCA3-E (C1-4)
10	D#3	YE	PCA3-D# (C1-3)
11	D3	OR	PCA3-D (C1-2)
12	C#3	RE	PCA3-C# (C1-1)

C5			
Pin No.	Pin Name	Wire Color	Destination
1	C5	BR	PCA4-C (C3-5)
2	B4	PK	PCA4-B (C3-4)
3	A#4	SB	PCA4-A# (C3-3)
4	A4	GG	PCA4-A (C3-2)
5	G#4	WH	PCA4-G# (C3-1)
6	G4	GY	PCA4-G (C1-7)
7	F#4	VI	PCA4-F# (C1-6)
8	F4	BE	PCA4-F (C1-5)
9	E4	GR	PCA4-E (C1-4)
10	D#4	YE	PCA4-D# (C1-3)
11	D4	OR	PCA4-D (C1-2)
12	C#4	RE	PCA4-C# (C1-1)

C6			
Pin No.	Pin Name	Wire Color	Destination
1	C6	BR	PCA5-C (C3-5)
2	B5	PK	PCA5-B (C3-4)
3	A#5	SB	PCA5-A# (C3-3)
4	A5	GG	PCA5-A (C3-2)
5	G#5	WH	PCA5-G# (C3-1)
6	G5	GY	PCA5-G (C1-7)
7	F#5	VI	PCA5-F# (C1-6)
8	F5	BE	PCA5-F (C1-5)
9	E5	GR	PCA5-E (C1-4)
10	D#5	YE	PCA5-D# (C1-3)
11	D5	OR	PCA5-D (C1-2)
12	C#5	RE	PCA5-C# (C1-1)

C7			
Pin No.	Pin Name	Wire Color	Destination
1	C7	BR	PCA6-C (C3-5)
2	B6	PK	PCA6-B (C3-4)
3	A#6	SB	PCA6-A# (C3-3)
4	A6	GG	PCA6-A (C3-2)
5	G#6	WH	PCA6-G# (C3-1)
6	G6	GY	PCA6-G (C1-7)
7	F#6	VI	PCA6-F# (C1-6)
8	F6	BE	PCA6-F (C1-5)
9	E6	GR	PCA6-E (C1-4)
10	D#6	YE	PCA6-D# (C1-3)
11	D6	OR	PCA6-D (C1-2)
12	C#6	RE	PCA6-C# (C1-1)

C8			
Pin No.	Pin Name	Wire Color	Destination
1	C8	BR	PCA7-C (C3-5)
2	B7	PK	PCA7-B (C3-4)
3	A#7	SB	PCA7-A# (C3-3)
4	A7	GG	PCA7-A (C3-2)
5	G#7	WH	PCA7-G# (C3-1)
6	G7	GY	PCA7-G (C1-7)
7	F#7	VI	PCA7-F# (C1-6)
8	F7	BE	PCA7-F (C1-5)
9	E7	GR	PCA7-E (C1-4)
10	D#7	YE	PCA7-D# (C1-3)
11	D7	OR	PCA7-D (C1-2)
12	C#7	RE	PCA7-C# (C1-1)

C9			
Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	DC-7 (C4-1)
2	Vss	BL	DC-Vss (C4-2)
3	-12	BE	DC-12 (C4-3)
4	-15	BR	DC-15 (C4-4)
5	E	BL	DC-E (C4-5)
6	+15	OR	DC+15 (C4-6)

C7			
Pin No.	Pin Name	Wire Color	Destination
12	C#6		
11	D#6		
10	D#6		
9	E#6		
8	F#6		
7	F#6		
6	G#6		
5	G#6		
4	A#6		
3	A#6		
2	B#6		
1	C#7		

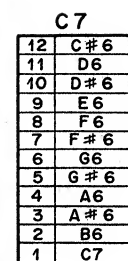
C8			
Pin No.	Pin Name	Wire Color	Destination
12	C#7		
11	D#7		
10	D#7		
9	E#7		
8	F#7		
7	F#7		
6	G#7		
5	G#7		
4	A#7		
3	A#7		
2	B#7		
1	C#8		

C9			
Pin No.	Pin Name	Wire Color	Destination
6	+15		
5	E		
4	-15		
3	-12		
2	Vss		
1	-7		

C5			
Pin No.	Pin Name	Wire Color	Destination
1	C5	BR	PCA4-C (C3-5)
2	B4	PK	PCA4-B (C3-4)
3	A#4	SB	PCA4-A# (C3-3)
4	A4	GG	PCA4-A (C3-2)
5	G#4	WH	PCA4-G# (C3-1)
6	G4	GY	PCA4-G (C1-7)
7	F#4	VI	PCA4-F# (C1-6)
8	F4	BE	PCA4-F (C1-5)
9	E4	GR	PCA4-E (C1-4)
10	D#4	YE	PCA4-D# (C1-3)
11	D4	OR	PCA4-D (C1-2)
12	C#4	RE	PCA4-C# (C1-1)

(Notes)

- Circuit Board :
- Transistors
Tr1, 3, 5 : 2S
Tr2, 4, 6 : 2S
- IC
IC1 : YI
IC2 ~ 5 : YI
IC6 : µF
IC7 : N.
IC8 : µF
- Diodes
D1 ~ 6 : 1S
- Resistor
R marked : R
* marked : FI



C 8	
12	C#7
11	D7
10	D#7
9	E7
8	F7
7	F#7
6	G7
5	G#7
4	A7
3	A#7
2	B7
1	C8

6	+15
5	E
4	-15
3	-12
2	Vss
1	-7

Pin No.	Pin Name	Wira Color	Destination
1	C1	BR	PCB-C (C1-4)
2	BO	PK	PCB-B (C1-3)
3	A# O	SB	PCB-A# (C1-2)
4	AO	GG	PCB-A (C1-1)
5	—	—	—

C2			
Pin No.	Pin Name	Wire Color	Destination
1	C2	BR	PCA1-C (C3-5)
2	B1	PK	PCA1-B (C3-4)
3	A # 1	SB	PCA1-A # (C3-3)
4	A1	GG	PCA1-A (C3-2)
5	G # 1	WH	PCA1-G # (C3-1)
6	G1	GY	PCA1-G (C1-7)
7	F # 1	VE	PCA1-F # (C1-6)
8	F1	BE	PCA1-F (C1-5)
9	E1	GR	PCA1-E (C1-4)
10	D # 1	YE	PCA1-D # (C1-3)
11	D1	OR	PCA1-D (C1-2)
12	C # 1	RE	PCA1-C # (C1-1)

C3			
Pin No.	Pin Name	Wire Color	Destination
1	C3	BR	PCA2-C (C3-5)
2	B2	PK	PCA2-B (C3-4)
3	A # 2	SB	PCA2-A # (C3-3)
4	A2	GG	PCA2-A (C3-2)
5	G # 2	WH	PCA2-G # (C3-1)
6	G2	GY	PCA2-G (C1-7)
7	F # 2	VI	PCA2-F # (C1-6)
8	F2	BE	PCA2-F (C1-5)
9	E2	GR	PCA2-E (C1-4)
10	D # 2	YE	PCA2-D # (C1-3)
11	D2	OR	PCA2-D (C1-2)
12	C # 2	RE	PCA2-C # (C1-1)

C4			
Pin No.	Pin Name	Wire Color	Destination
1	C4	BR	PCA3-C (C3-5)
2	B3	PK	PCA3-B (C3-4)
3	A # 3	SB	PCA3-A-# (C3-3)
4	A3	GH	PCA3-A (C3-2)
5	G # 3	WH	PCA3-G-# (C3-1)
6	G3	GY	PCA3-G (C1-7)
7	F # 3	VI	PCA3-F-# (C1-6)
8	F3	BE	PCA3-F (C1-5)
9	E3	GR	PCA3-E (1-4)
10	D # 3	YE	PCA3-D-# (C1-3)
11	D3	OR	PCA3-D (C1-2)
12	C # 3	RE	PCA3-C-# (C1-1)

C5				
Pin No.	Pin Name	Wira Color	Destination	
1	C5	BR	PCA4-C (C3-5)	
2	B4	PK	PCA4-B (C3-4)	
3	A # 4	SB	PCA4-A# (C3-C3)	
4	A4	GG	PCA4-A (C3-2)	
5	G # 4	WH	PCA4-G# (C3-1)	
6	G4	GY	PCA4-G (C1-7)	
7	F # 4	VI	PCA4-F# (C1-6)	
8	F4	BE	PCA4-F (C1-5)	
9	E4	GR	PCA4-E (C1-4)	
10	D # 4	YE	PCA4-D# (C1-3)	
11	D4	OR	PCA4-D (C1-2)	
12	C # 4	RE	PCA4-C # (C1-1)	

C6			
Pin No.	Pin Name	Wire Color	Destination
1	C6	BR	PCA5-C (C3-5)
2	B5	PK	PCA5-B (C3-4)
3	A # 5	SB	PCA5-A # (C3-3)
4	A5	GG	PCA5-A (C3-2)
5	G # 5	WH	PCA5-G # (C3-1)
6	G5	GY	PCA5-G (C1-7)
7	F # 5	VI	PCA5-F # (C1-6)
8	F5	BE	PCA5-F (C1-5)
9	E5	GR	PCA5-E (C1-4)
10	D # 5	YE	PCA5-D # (C1-3)
11	D6	OR	PCA5-D (C1-2)
12	C # 5	RE	PCA5-C # (C1-1)

C7			
Ptn No.	Ptn Name	Wira Color	Destination
1	C7	BR	PCA6-C (C3-5)
2	B6	PK	PCA6-B (C3-4)
3	A #6	SB	PCA6-A # (C3-3)
4	A6	GG	PCA6-A (C3-2)
5	G #6	WH	PCA6-G # (C3-1)
6	G6	GY	PCA6-G (C1-7)
7	F #6	VI	PCA6-F # (C1-6)
8	F6	BE	PCA6-F (C1-5)
9	E6	GR	PCA6-E (C1-4)
10	D #6	YE	PCA6-D # (C1-3)
11	D6	OR	PCA6-D (C1-2)
12	C #6	RE	PCA6-C # (C1-1)

C8				
Pin No.	Pin Name	Wira Color	Destination	
1	C8	BR	PCA7-C (C3-5)	
2	B7	PK	PCA7-B (C3-4)	
3	A #7	SB	PCA7-A# (C3 3)	
4	A7	GG	PCA7-A (C3-2)	
5	G #7	WH	PCA7 (G # (C3-1)	
6	G7	GY	PCA7-G (C1-7)	
7	F #7	V1	PCA7-F # (C1-6)	
8	F7	BE	PCA7-F (C1-5)	
9	E7	GR	PCA7-E (C1-4)	
10	D #7	YE	PCA7-D # (C1-3)	
11	D7	OR	PCA7-D (C1-2)	
12	C #7	RE	PCA7-C # (C1-1)	

Pin No.	Pin Name	Wira Color	Destination
1	-7	GR	DC-7 (C4-1)
2	Vss	BL	DC-Vss (C4-2)
3	-12	BE	DC-12 (C4-3)
4	-15	BR	DC-15 (C4-4)
5	E	BL	DC-E (C4-5)
6	+15	OR	DC+15 (C4-6)

- * marked : Flame proof carbon film resistor.

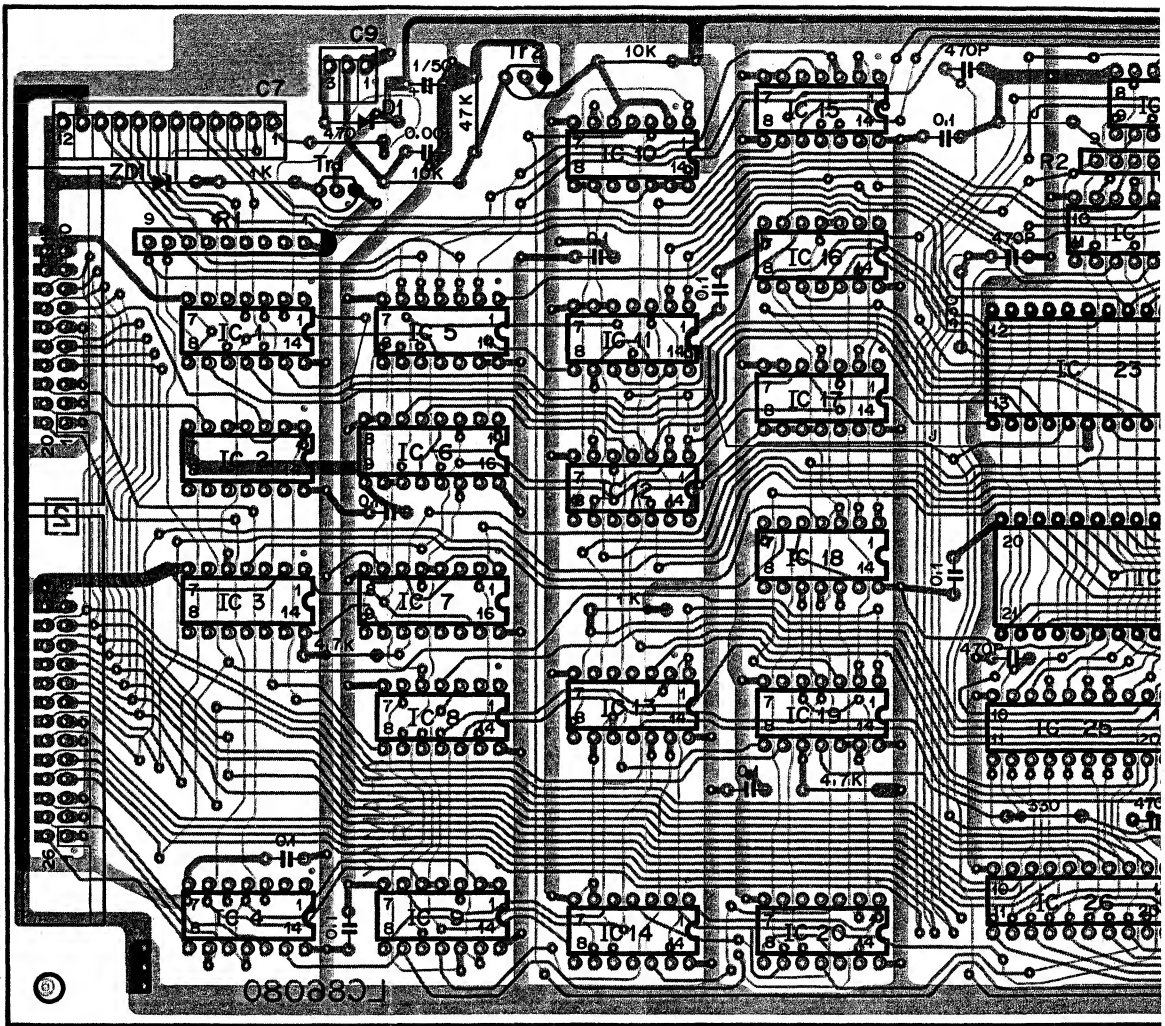
GS1

C1				C3				C7				C9			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	S1	BR	SELL-S1 (C1-8)	1	S1	BR	SEL-R-S1 (C1-8)	1	STRD	BR	LED-1	1	-12	BE	DC-12 (C11-1)
2	L1	RE	SELL-L1 (C1-7)	2	L9	RE	SEL-R-L9 (C1-7)	2	REV	RE	CR-REV (C1-1)	2	PON	PK	DC-PON (C11-2)
3	S2	OR	SELL-S2 (C1-6)	3	S2	OR	SEL-R-S2 (C1-6)	3	MSW	OR	CR-MSW (C1-6)	3	-7B	VI	DC-7B (C11-3)
4	L2	YE	SELL-L2 (C1-5)	4	L10	YE	SEL-R-L10 (C1-5)	4	WPR	YE	CR-WPR (C1-5)				
5	S3	GR	SELL-S3 (C1-4)	5	S3	GR	SEL-R-S3 (C1-4)	5	WEN	GR	CR-WEN (C1-3)				
6	L3	BE	SELL-L3 (C1-3)	6	L11	BE	SEL-R-L11 (C1-3)	6	WDT	BE	CR-WDT (C1-4)				
7	S4	VI	SELL-S4 (C1-2)	7	S4	VI	SEL-R-S4 (C1-2)	7	CLD	VI	CR-CLD (C1-7)				
8	L4	GY	SELL-L4 (C1-1)	8	L12	GY	SEL-R-L12 (C1-1)	8	MON	GY	CR-MON (C1-8)				
9	WRITE	WH	CNB-WRITE (C7-8)	9	PLK	SB	CNB-PLK (C7-8)	9	RCK	WH	CR-RCK (C1-9)				
10	-12	BE	CNB-12 (C7-7)	10	S1	BR	CNB-S1 (C7-9)	10	RDT	GG	CR-RDT (C1-10)				

C2				C4			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	S5	BR	SELL-S5 (C2-10)	1	S5	BR	SEL-R-S5 (C2-8)
2	L5	RE	SELL-L5 (C2-9)	2	L13	RE	SEL-R-L13 (C12-7)
3	S6	OR	SELL-S6 (C2-8)	3	S6	OR	SEL-R-S6 (C2-6)
4	L6	YE	SELL-L6 (C2-7)	4	L14	YE	SEL-R-L14 (C2-5)
5	S7	GR	SELL-S7 (C2-6)	5	S7	GR	SEL-R-S7 (C2-4)
6	L7	BE	SELL-L7 (C2-5)	6	L15	BE	SEL-R-L15 (C2-3)
7	S8	VI	SELL-S8 (C2-4)	7	S8	VI	SEL-R-S8 (C2-2)
8	L8	GY	SELL-L8 (C2-3)	8	L16	GY	SEL-R-L16 (C2-1)
9	STO	GG	SELL-STO (C2-2)	9	ST1	PK	SEL-R-ST1 (C1-9)
10	Vss	BL	SELL-Vss (C2-1)	10	Vss	BL	SEL-R-Vss (C1-10)

C8			
Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	DC-7 (C3-1)
2	Vss	BL	DC-Vss (C3-2)
3	-12	BE	DC-12 (C3-3)
4			
5			
6			

C7												C9		
12	-12											3	-7B	
11	-7											2	PON	
10	RDT											1	-12	
9	RCK													
8	MON													
7	WDT													
6	WEN													
5	WPR													
4	MSW													
3	REV													
2	STRD													



RW Circuit Board & Wiring

GS1

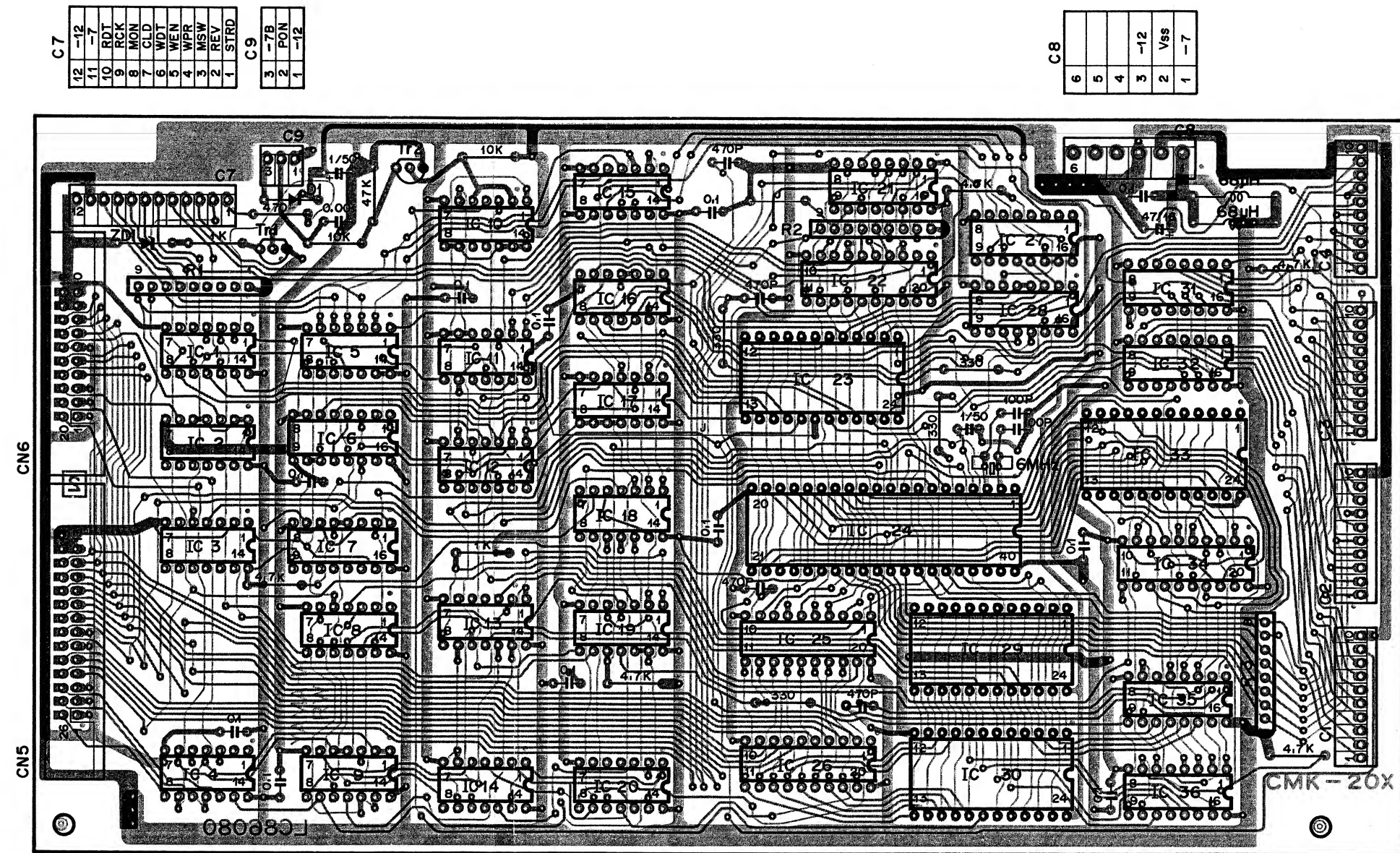
C3		C7		C9	
Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
BR	SELR-S1 (C1-8)	1	STRD	BR	LED-1
RE	SELR-L9 (C1-7)	2	REV	RE	CR-REV (C1-1)
OR	SELR-S2 (C1-6)	3	MSW	OR	CR-MSW (C1-6)
YE	SELR-L10 (C1-5)	4	WPR	YE	CR-WPR (C1-5)
GR	SELR-S3 (C1-4)	5	WEN	GR	CR-WEN (C1-3)
BE	SELR-L11 (C1-3)	6	WDT	BE	CR-WDT (C1-4)
VI	SELR-S4 (C1-2)	7	CLD	VI	CR-CLD (C1-7)
GY	SELR-L12 (C1-1)	8	MON	GY	CR-MON (C1-8)
SB	CNB-PLK (C7-8)	9	RCK	WH	CR-RCK (C1-9)
BR	CNB-S1 (C7-9)	10	RDT	GG	CR-RDT (C1-10)
		11	-7	GR	CR-5V (C1-11)
		12	-12	BE	CR-GND (C1-12)

C4		C8	
Wire Color	Destination	Pin No.	Pin Name
BR	SELR-S5 (C2-9)	1	-7
RE	SELR-L13 (C12-7)	2	Vss
OR	SELR-S6 (C2-6)	3	-12
YE	SELR-L14 (C2-5)	4	
GR	SELR-S7 (C2-4)	5	
BE	SELR-L15 (C2-3)	6	
VI	SELR-S8 (C2-2)		
GY	SELR-L16 (C2-1)		
PK	SELR-ST1 (C1-9)		
BL	SELR-Vss (C1-10)		

GS2

C3		C7		C9	
Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
BR	SELR-S1 (C1-4)	1	STRD	BR	STO-STRD (C1-4)
RE	SELR-L9 (C1-3)	2	REV	RE	CR-REV (C1-1)
OR	SELR-S2 (C1-6)	3	MSW	OR	CR-MSW (C1-6)
YE	SELR-L10 (C1-5)	4	WPR	YE	CR-WPR (C1-5)
GR	SELR-S3 (C1-8)	5	WEN	GR	CR-WEN (C1-3)
BE	SELR-L11 (C1-7)	6	WDT	BE	CR-WDT (C1-4)
VI	SELR-S4 (C1-10)	7	CLD	VI	CR-CLD (C1-7)
GY	SELR-L12 (C1-9)	8	MON	GY	CR-MON (C1-8)
WH	LOCK SW-center terminal	9	RCK	WH	CR-RCK (C1-9)
-	-	10	RDT	GG	CR-RDT (C1-10)
		11	-7	GR	CR-5V (V1-11)
		12	-12	BE	CR-GND (C1-12)

C4		C8	
Wire Color	Destination	Pin No.	Pin Name
BR	SELR-S5 (C2-2)	1	-7
RE	SELR-L13 (C2-1)	2	Vss
OR	SELR-S6 (C2-4)	3	-12
YE	SELR-L14 (C2-3)	4	
GR	SELR-S7 (C2-6)	5	
BE	SELR-L15 (C2-5)	6	
VI	SELR-S8 (C2-8)		
GY	SELR-L16 (C2-7)		
PK	SELR-ST1 (C1-1)		
-	-		



View from the component side of the circuit board

(Notes)

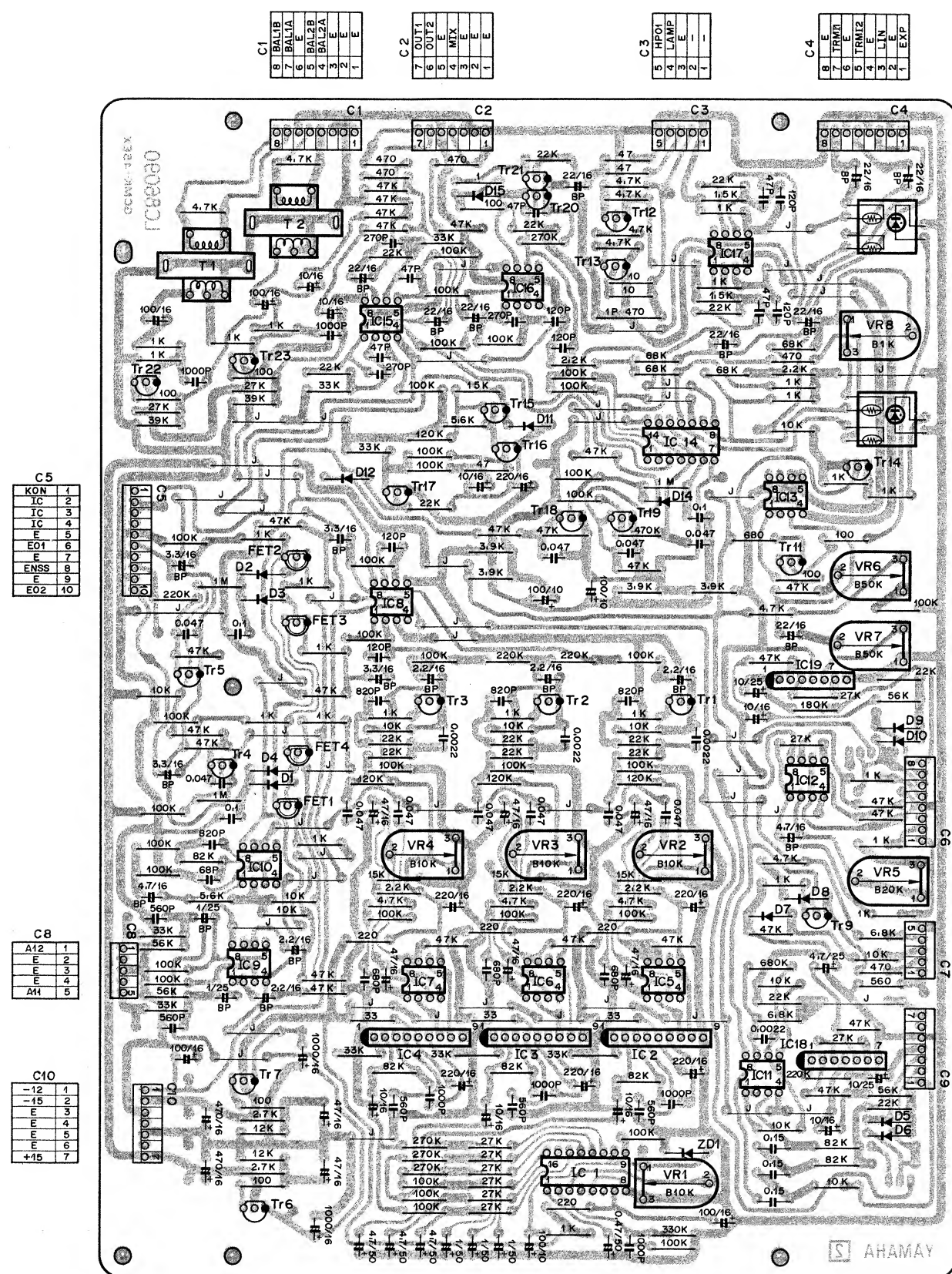
- Circuit Board : LC86080 ②
- Transistors
 - Tr1 : 2SA509 (O, Y)
 - Tr2 : 2SC458 (C)
- Diodes
 - D1 : 1N34A
 - ZD1 : RD3.6EB1
- IC
 - IC1 : HD7416
 - IC2, 13 : HD74LS08P
 - IC3 : TC4024BP
 - IC4, 8, 18 : HD74LS04P
 - IC5, 12 : TC4069UBP
 - IC6 : TC4027BP
 - IC7 : TC40161BP
 - IC9, 16, 20 : HD74LSOOP
 - IC10 : TC40HO32P
 - IC11 : TC4011BP
 - IC14 : HC74LS20P
 - IC15, 17 : TC4013BP
 - IC19 : HD74LS74A
 - IC21 : HD74LS366
 - IC22 : HD74LS240P
 - IC23 : μ PD8243
 - IC24 : μ PD8035
 - IC25, 26 : SN72LS245
 - IC27 : TC4028BP
 - IC28 : HD74LS138P
 - IC29, 30 : TC5516P
 - IC31, 32 : HD74145
 - IC33 : MB8516
 - IC34 : SN74LS273
 - IC35, 36 : HD74LS161P
- Capacitor
 - 0.1 : Ceramic capacitor
 - marked : Cerarock capacitor CSA6.00
- Resistor
 - R1, 2, 3 : 4.7K x 8 (Resistor)

7. Connector

- C1, 2, 3, 4 : NH Connector 10P (T, E)
- C7 : NH Connector 12P (T, E)
- C9 : NH Connector 3P (T, E)
- CN5 : Header 26P
- CN6 : Header 20P
- C8 : 3.96 pitch 6P

8.

NA number	IC29	Jumper wire
GS1 NA80695	○	○
GS2 NA80742		



GS1

C1

Pin No.	Pin Name	Wire Color	Destination
1	E	S BE S	
2	E	S VIS	
3	E	S GY S	
4	BAL2A	S BE	CNP-BAL2A (C1-4)
5	BAL2B	S VI	CNP-BAL2B (C1-5)
6	E	S WH S	
7	BAL1A	S GY	CNP-BAL1A (C1-7)
8	BAL1B	S WH	CNP-BAL1B (C1-8)

C2

Pin No.	Pin Name	Wire Color	Destination
1	E	—	—
2	E	S OR S	—
3	E	S YE S	—
4	MIX	S OR	CNP-MIX (C2-4)
5	E	S GR S	—
6	OUT2	S YE	CNP-OUT2 (C2-6)
7	OUT1	S GR	CNP-OUT1 (C2-7)

C3

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	—	—	—
3	E	BL	CNX-E (C2-1)
4	LAMP	YE	CNX-LAMP (C2-2)
5	HPO1	BR	CNX-HPO1 (C2-3)
6	HPO2	RE	CNX-HPO2 (C2-4)
7	E	BL	CNX-E (C2-5)

C4

Pin No.	Pin Name	Wire Color	Destination
1	EXP	BE	CNB-EXP (C7-2)
2	E	—	—
3	LIN	VI	CNB-LIN (C7-1)
4	E	—	—
5	TRM12	S BR	EQ-EQ02 (C2-5)
6	E	S BR S	—
7	TRM11	S RE	EQ-EQ01 (C2-2)
8	E	S RES	—

C5

Pin No.	Pin Name	Wire Color	Destination
1	KON	YE	—
2	IC	OR	KC-IC (C1-3)
3	IC	GY	CNB-IC (C6-5)
4	IC	—	—
5	E	—	—
6	EO1	S OR	EQ-EQ11 (C1-2)
7	E	S OR S	—
8	ENSS	GR	TET-ENS (C1-4)
9	E	S YE S	—
10	EO2	S YE	EQ-EQ12 (C1-1)

C6

Pin No.	Pin Name	Wire Color	Destination
1	TRMDO	RE	EFF-TDI (C2-2)
2	TRMSI	OR	EFF-TRO (C2-3)
3	—	—	—
4	E	—	—
5	TRMSO	YE	EFF-TSI (C2-4)
6	TRMPO	GR	CNB-TRM (C6-7)
7	TRMSW	BE	TET-TRM (C1-5)
8	TRMDI	BR	EFF-TDO (C2-1)

GS2

C7

Pin No.	Pin Name	Wire Color	Destination
1	PC3	GR	CNB-PC3 (C7-5)
2	PC0	RE	KC-VIB (C1-2)
3	PC2	OR	CNB-PC2 (C7-4)
4	PC1	YE	CNB-PC1 (C7-3)
5	E	BL	EFF-E (C1-4)

C8

Pin No.	Pin Name	Wire Color	Destination
1	A12	S BE	FM2-AO (C3-4)
2	E	S BE S	FM2-E (C3-3)
3	E	—	—
4	E	S GR S	FM1-E (C3-3)
5	A11	S GR	FM1-AO (C3-4)

C9

Pin No.	Pin Name	Wire Color	Destination
1	V1BSP	VI	EFF-VSI (C1-3)
2	V1BPD	GG	CNB-V1B (C6-8)
3	—	—	—
4	V1BDI	GR	EFF-VDO (C1-1)
5	E	—	—
6	V1BDO	BE	EFF-VDI (C1-2)

C10

Pin No.	Pin Name	Wire Color	Destination
1	—12	BE	CNB-—12 (C2-1)
2	—15	BR	CNB-—15 (C2-3)
3	E	—	—
4	E	—	—
5	E	—	—
6	E	BL	CNB-E (C2-5)
7	+15	OR	CNB-+15 (C2-7)

GS2

C1

Pin No.	Pin Name	Wire Color	Destination
1	E	S RES	BAL2 OUT-PIN1
2	E	S OR S	BAL2 OUT-PIN1
3	E	S YE S	BAL1 OUT-PIN1
4	BAL2A	S RE	BAL2 OUT-PIN2
5	BAL2B	S OR	BAL2 OUT-PIN3
6	E	S GR S	BAL1 OUT-PIN1
7	BAL1A	S YE	BAL1 OUT-PIN2
8	BAL1B	S GR	BAL1 OUT-PIN3

C8

Pin No.	Pin Name	Wire Color	Destination
1	A12	S BE	FM-AO (C3-5)
2	E	—	—
3	E	—	—
4	E	S GR S	FM-E (C3-2)
5	A11	S GR	FM-AO (C3-4)

C9

Pin No.	Pin Name	Wire Color	Destination
1	V1BSP	VI	EFF-V1BSP (C3-3)
2	V1BPD	GG	FC-P1-8 F/S4P-4
3	—	—	—
4	V1BDI	GR	EFF-V1BDI (C3-5)
5	E	—	—
6	—	—	—
7	V1BDO	BE	EFF-V1BDO (C3-4)

C10

Pin No.	Pin Name	Wire Color	Destination
1	—12	BE	DC-—12 (C3-3)
2	—15	BR	DC-—15 (C3-4)
3	E	—	—
4	E	—	—
5	E	—	—
6	E	BL	DC-E (C3-5)
7	+15	OR	DC-+15 (C3-6)

C3

Pin No.	Pin Name	Wire Color	Destination
1	E	BL	MKL-EP
2	LAMP	YE	FC-P1-3 F/C-J-pin2
3	HPO1	BR	HP-P1-2 HP-J-R
4	HPO2	RE	HP-P1-1 HP-J-L
5	E	BL	HP-P1-3 HP-J-E

C4

Pin No.	Pin Name	Wire Color	Destination
1	EXP	BE	FC-P1-1 F/C-J-pin4
2	E	BL	FC-P1-2 F/C-J-pin3,8
3	LIN	VI	HP-P1-4 LINE SW Center Terminal
4	E	—	—
5	TRM12	S BR	EQ-TRM12 (C2-1)
6	E	S BR S	—
7	TRM11	S RE	EQ-TRM11 (C2-4)
8	E	S RES	—

C5

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	IC	OR	KC-IC (C1-3)
3	IC	—	—
4	IC	—	—
5	E	—	—
6	EO1	S OR	EQ-EQ1 (C1-4)
7	E	S OR S	—
8	ENSS	GR	SELL-ENSS (C1-4)
9	E	S YE S	—
10	EO2	S YE	EQ-EQ2 (C1-5)

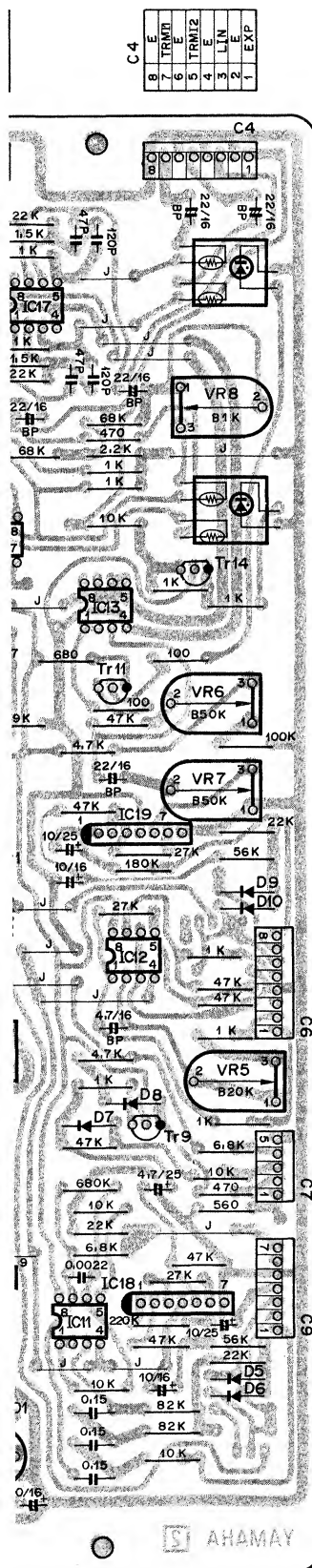
C6

Pin No.	Pin Name	Wire Color	Destination
1	TRMDO	RE	EFF-TRMDO (C4-4)
2	TRMSI	OR	EFF-TRMSI (C4-3)
3	—	—	—
4	E	—	—
5	TRMSO	YE	EFF-TRMSO (C4-2)
6	TRMPO	GR	FC-P1-7 F/S4P-3
7	TRMSW	BE	SELL-TRMSW (C1-1)
8	TRMDI	BR	EFF-TRMDI (C4-5)

C7

Pin No.	Pin Name	Wire Color	Destination
1	PC3	GR	EFF-PC3 (C1-2)
2	PC0	RE	KC-VIB (C1-2)
3	PC2	OR	EFF-PC2 (C1-3)
4	PC1	YE	EFF-PC1 (C1-4)
5	E	BL	EFF-E (C1-1)

- (Notes)
1. Circuit B
 2. Transistors
Tr1 ~ 3,
Tr4, 5, 9
Tr6, 13,
Tr7, 11,
Tr12
Tr20
Tr21
 3. FET
FET1 ~
 4. IC
IC1
IC2 ~ 4
IC5 ~ 7
IC8 ~ 13
IC14
IC18, 19
 5. Diodes
D1 ~ 12,
 6. Zener Diodes
ZD1
 7. Connectors
C1, 4, 6
C2, 9, 10
C3, 7, 8
C5



C1			
Pin No.	Pin Name	Wire Color	Destination
1	E	S B E S	
2	E	S V I S	
3	E	S G Y S	
4	BAL2A	S B E	CNP-BAL2A (C1-4)
5	BAL2B	S V I	CNP-BAL2B (C1-5)
6	E	S W H S	
7	BAL1A	S G Y	CNP-BAL1A (C1-7)
8	BAL1B	S W H	CNP-BAL1B (C1-8)

C2

Pin No.	Pin Name	Wire Color	Destination
1	E	—	—
2	E	S O R S	—
3	E	S Y E S	—
4	MIX	S O R	CNP-MIX (C2-4)
5	E	S G R S	—
6	OUT2	S Y E	CNP-OUT2 (C2-6)
7	OUT1	S G R	CNP-OUT1 (C2-7)

C3

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	—	—	—
3	E	BL	CNX-E (C2-1)
4	LAMP	YE	CNX-LAMP (C2-2)
5	HPO1	BR	CNX-HPO1 (C2-3)
6	HPO2	RE	CNX-HPO2 (C2-4)
7	E	BL	CNX-E (C2-5)

C4

Pin No.	Pin Name	Wire Color	Destination
1	EXP	BE	CNB-EXP (C7-2)
2	E	—	—
3	LIN	V1	CNB-LIN (C7-1)
4	E	—	—
5	TRMI2	S BR	EQ-EQO2 (C2-5)
6	E	S BR S	
7	TRMI1	S RE	EQ-EQO1 (C2-2)
8	E	S RE S	

C5			
Pin No.	Pin Name	Wire Color	Destination
1	KON	YE	—
2	IC	OR	KC-IC (C1-3)
3	IC	GY	CNB-IC (C6-5)
4	IC	—	—
5	E	—	—
6	EO1	S OR	EQ-EQ11 (C1-2)
7	E	S OR S	—
8	ENSS	GR	TET-ENS (C1-4)
9	E	S YE S	—
10	EO2	S YE	EQ-EQ12 (C1-1)

Pin No.	Pin Name	Wire Color	Destination
1	TRMDO	RE	EFF-TDI (C2-2)
2	TRMSI	OR	EFF-TRO (C2-3)
3	—	—	—
4	E	—	—
5	TRMSO	YE	EFF-TSI (C2-4)
6	TRMPO	GR	CNB-TRM (C6-7)
7	TRMSW	BE	TEF-TRM (C1-5)
8	TRMDI	BR	EFF-TDO (C2-1)

Pin No.	Pin Name	Wire Color	Destination
1	PC3	GR	CNB-PC3 (C7-5)
2	PC0	RE	KC-VIB (C1-2)
3	PC2	OR	CNB-PC2 (C7-4)
4	PC1	YE	CNB-PC1 (C7-3)
5	E	BL	EFF-E (C1-4)

Pin No.	Pin Name	Wire Color	Destination
1	AI2	S BE	FM2-AO (C3-4)
2	E	S BE S	FM2-E (C3-3)
3	E	—	—
4	E	S GR S	FM1-E (C3-3)
5	AI1	S GR	FM1-AO (C3-4)

Pin No.	Pin Name	Wire Color	Destination
1	V1BSP	VI	EFF-VSI (C1-3)
2	V1BPD	GG	CN8-V1B (C6-8)
3	—	—	—
4	V1BDI	GR	EFF-VDO (C1-1)
5	E	—	—
6	—	—	—
7	V1BDO	BE	EFF-VDI (C1-2)

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	CNB-12 (C2-1)
2	-15	BR	CNB-15 (C2-3)
3	E	—	—
4	E	—	—
5	E	—	—
6	E	BL	CNB-E (C2-5)
7	+15	OR	CNB+15 (C2-7)

Pin No.	Pin Name	Wire Color	Destination
1	E	S R E S	BAL2 OUT-PIN1
2	E	S O R S	BAL2 OUT-PIN1
3	E	S Y E S	BAL1 OUT-PIN1
4	BAL2A	S R E	BAL2 OUT-PIN2
5	BAL2B	S O R	BAL2 OUT-PIN3
6	E	S G R S	BAL1 OUT-PIN1
7	BAL1A	S Y E	BAL1 OUT-PIN2
8	BAL1B	S G R	BAL1 OUT-PIN3

Pin No.	Pin Name	Wire Color	Destination
1	E	BL	MKL-EP
2	LAMP	YE	FC-P13 F/C-J-pin2
3	HPO1	BR	HP-P12 HP-J-R
4	HPO2	RE	HP-P11 HP-J-L
5	E	BL	HP-P13 HP-J-E

Pin No.	Pin Name	Wire Color	Destination
1	EXP	BE	FC-P1-1 F/C-J-pin4
2	E	BL	FC-P1-2 F/C-J-pin3,8
3	LIN	VI	HP-P1.4 LINE SW Center Terminal
4	E	—	—
5	TRMI2	S BR	EQ-TRMI2 (C2-1)
6	E	S BR S	
7	TRMI1	S RE	EQ-TRMI1 (C2-4)
8	E	S RES	

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	1C	OR	KC-1C (C1-3)
3	1C	—	—
4	1C	—	—
5	E	—	—
6	E01	S OR	EQ-E01 (C1-4)
7	E	S OR S	—
8	ENSS	S OR S	SELL-ENSS (C1-4)
9	E	S YE S	—
10	E02	S YE	EQ-E02 (C1-5)

C6			
Pin No.	Pin Name	Wire Color	Destination
1	TRMDO	RE	EFF-TRMDO (C4-4)
2	TRMSI	OR	EFF-TRMSI (C4-3)
3	—	—	—
4	E	—	—
5	TRMSO	YE	EFF-TRMSO (C4-2)
6	TRMPD	GR	FC-P1-7 F/S4P3
7	TRMSW	BE	SELL-TRMSW (C1-1)
8	TRMDI	BR	EFF-TRMDI (C4-5)

Pin No.	Pin Name	Wire Color	Destination
1	PC3	GR	EFF-PC3 (C1-2)
2	PC0	RE	KC-VIB (C1-2)
3	PC2	OR	EFF-PC2 (C1-3)
4	PC1	YE	EFF-PC1 (C1-4)
5	E	BL	EFF-E (C1-1)

Pin No.	Pin Name	Wire Color	Destination
1	AI2	S BE	FM-AO (C3-5)
2	E	—	—
3	E	—	—
4	E	S GR S	FM-E (C3-2)
5	AI1	S GR	FM-AO (C3-4)

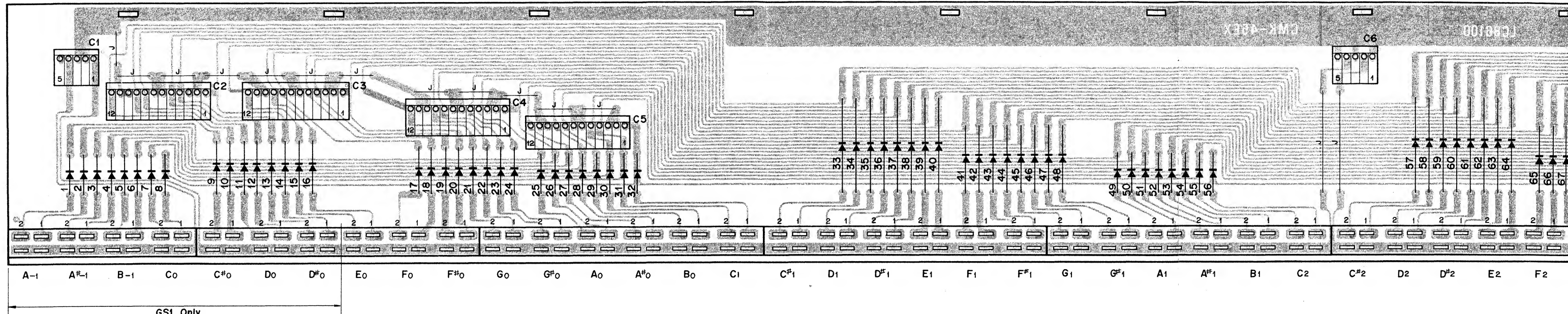
Pin No.	Pin Name	Wire Color	Destination
1	VIBSP	VI	EFF-VIBSP (C3-3)
2	VIBPD	GG	FC-P1-8 F/S4P4
3	—	—	—
4	VIBDI	GR	EFF-VIBDI (C3-5)
5	E	—	—
6	—	—	—
7	VIBDO	BE	EFF-VIBDO (C3-4)

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	DC-12 (C3-3)
2	-15	BR	DC-15 (C3-4)
3	E	-	-
4	E	-	-
5	E	-	-
6	E	BL	DC-E (C3-5)
7	+15	OR	DC+15 (C3-6)

(Notes)

1. Circuit Board : LC86090 ㉔
2. Transistors
 - Tr1 ~ 3, 22, 23 : 2SC458LG (C)
 - Tr4, 5, 9, 15, 18, 19 : 2SC458 (B, C)
 - Tr6, 13, 16 : 2SC509 (O, Y)
 - Tr7, 11, 14, 17 : 2SA509 (O, Y)
 - Tr12 : 2SA1015 (O, Y)
 - Tr20 : 2SC1212A (B, C)
 - Tr21 : 2SA743A (B, C)
3. FET
 - FET1 ~ 4 : 2SK105 (F)
4. IC
 - IC1 : YM633
 - IC2 ~ 4 : iG03290
 - IC5 ~ 7 : MN3009
 - IC8 ~ 13, 15 ~ 17 : NJM4558DV
 - IC14 : TC4016
 - IC18, 19 : iG02600
5. Diodes
 - D1 ~ 12, 14, 15 : 1S1555
6. Zener Diodes
 - ZD1 : WZ050
7. Connector
 - C1, 4, 6 : NH Connector 8P (T, E)
 - C2, 9, 10 : NH Connector 7P (T, E)
 - C3, 7, 8 : NH Connector 5P (T, E)
 - C5 : NH Connector 10P (T, E)

View from the component side of the circuit board



GS1

C1				C2				C3				C4				C5				C6				C7				C8				C9			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	L1	S VI	KC-L1 (C4-7)	1	D # 1	S BE	KC-D # 1 (C5-6)	1	F # 1	S PK	KC-F # 1 (C5-12)	1	A1	S BE	KC-A1 (C6-6)	1	C1	S PK	KC-C1 (C6-12)	1	Vss	—	—	1	C1	BR	MK2-C1 (C3-1)	1	F # 1	BR	MK2-F # 1 (C1-1)	1	C # 1	SB	MK2-C # 1 (C2-1)
2	Vss	S VI S		2	Vss	S BE S		2	Vss	S PK S		2	Vss	S BE S		2	Vss	S PK S		2	L3	S GR	KC-L3 (C4-5)	2	C2	RE	MK2-C2 (C3-2)	2	F # 2	RE	MK2-F # 2 (C1-2)	2	C # 2	PK	MK2-C # 2 (C2-2)
3	Vss	S GY S		3	Vss	S GR S		3	Vss	S SB S		3	Vss	S GR S		3	Vss	S SB S		3	Vss	S GR S		3	B1	OR	MK2-B1 (C3-3)	3	F1	OR	MK2-F1 (C1-3)	3	Vss	BL	MK2-Vss (C2-3)
4	LO	S GY	KC-LO (C4-8)	4	D # 2	S GR	KC-D # 2 (C5-5)	4	F # 2	S SB	KC-F # 2 (C5-11)	4	A7	S GR	KC-A2 (C6-5)	4	C2	S SB	KC-C2 (C6-11)	4	L2	S BE	KC-L2 (C4-6)	4	B2	YE	MK2-B2 (C3-4)	4	F2	YE	MK2-F2 (C1-4)	4	Vss	BL	MK2-Vss (C2-4)
				5	D1	S YE	KC-D1 (C5-4)	5	F1	S GG	KC-F1 (C5-10)	5	G # 1	S YE	KC-G # 1 (C6-4)	5	B1	S GG	KC-B1 (C6-10)	5	Vss	S BE S		5	A # 1	GR	MK2-A # 1 (C3-5)	5	E1	GR	MK2-E1 (C1-5)	5	Vss	BL	DC-Vss (C1-2)
				6	Vss	S YE S		6	Vss	S GG S		6	Vss	S YE S		6	Vss	S GG S		6	Vss	S BE S		6	A # 2	BE	MK2-A # 2 (C3-6)	6	E2	BE	MK2-E2 (C1-6)				
				7	Vss	S OR S		7	Vss	S WH S		7	Vss	S OR S		7	Vss	S WH S		7	Vss	S BE S		7	A1	VI	MK2-A1 (C3-7)	7	D # 1	VI	MK2-D # 1 (C1-7)				
				8	D2	S OR	KC-D2 (C5-3)	8	F2	S WH	KC-F2 (C5-9)	8	G # 2	S OR	KC-G # 2 (C6-3)	8	B2	S WH	KC-B2 (C6-9)	8	A2	GY	MK2-A2 (C3-8)	8	D # 2	GY	MK2-D # 2 (C1-8)								
				9	C # 1	S RE	KC-C # 1 (C5-2)	9	E1	S GY	KC-E1 (C5-8)	9	G1	S RE	KC-G1 (C6-2)	9	A # 1	S GY	KC-A # 1 (C6-8)	9	G # 1	WH	MK2-G # 1 (C3-9)	9	D1	WH	MK2-D1 (C1-9)								
				10	Vss	S RE S		10	Vss	S GY S		10	Vss	S RE S		10	Vss	S GY S		10	Vss	S BE S		10	G # 2	GG	MK2-G # 2 (C3-10)	10	D2	GG	MK2-D2 (C1-10)				
				11	Vss	S BR S		11	Vss	S VI S		11	Vss	S BR S		11	Vss	S VI S		11	Vss	S BE S		11	G1	SB	MK2-G1 (C3-11)								
				12	C # 2	S BR	KC-C # 2 (C5-1)	12	E2	S VI	KC-E2 (C5-7)	12	G2	S BR	KC-G2 (C6-1)	12	A # 2	S VI	KC-A # 2 (C6-7)	12	G2	PK	MK2-G2 (C3-12)												

(Notes)

- Circuit Board : LC86100 \square
- Diodes
D1 ~ 80 : 1S1555
- Connector
C1, 6, 9 : 5P (T, E)
C2 ~ 5, 7 : 12P (T, E)
C8 : 10P (T, E)

KEP-NA80697-04 \triangle

GS2

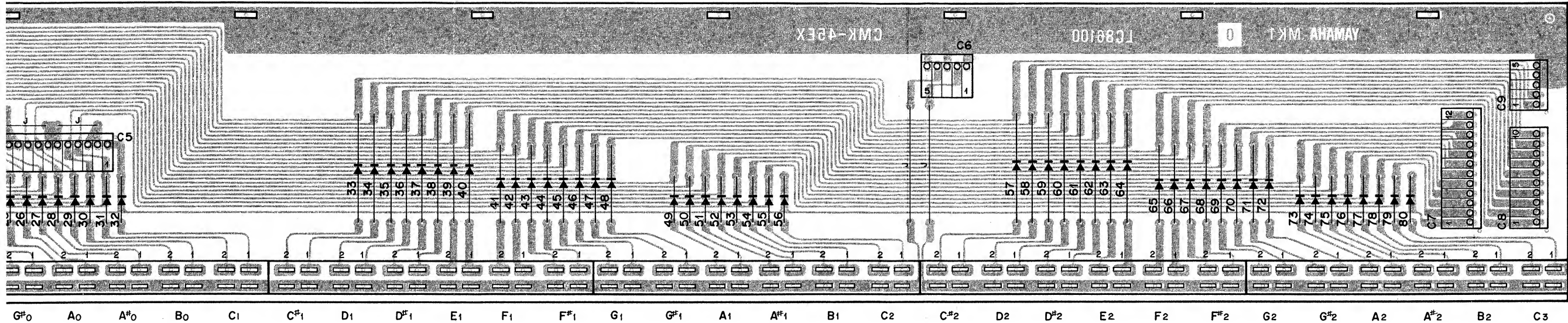
C1				C2				C3				C4				C5				C6				C7				C8				C9			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	L1	S VI	KC-L1 (C4-7)	1	D #1	S BE	KC-D #1 (C5-6)	1	F #1	S PK	KC-F #1 (C5-12)	1	A1	S BE	KC-A1 (C6-6)	1	C1	S PK	KC-C1 (C6-12)	1	Vss	—	—	1	C1	BR	MK3-C1 (C3-1)	1	F #1	BR	MK3-F #1 (C1-1)	1	C #1	SB	MK3-C #1 (C2-1)
2	Vss	S VI S	—	2	Vss	S BE S	—	2	Vss	S PK S	—	2	Vss	S BE S	—	2	Vss	S PK S	—	2	L3	S GR	KC-L3 (C4-5)	2	C2	RE	MK3-C2 (C3-2)	2	F #2	RE	MK3-F #2 (C1-2)	2	C #2	PK	MK3-C #2 (C2-2)
3	Vss	—	—	3	Vss	S GR S	—	3	Vss	S SB S	—	3	Vss	S GR S	—	3	Vss	S SB S	—	3	Vss	S GR S	—	3	B1	OR	MK3-B1 (C3-3)	3	F1	OR	MK3-F1 (C1-3)	3	Vss	BL	MK3-Vss (C2-3)
4	LO	—	—	4	D #2	S GR	KC-D #2 (C5-5)	4	F #2	S SB	KC-F #2 (C5-11)	4	A2	S GR	KC-A2 (C6-5)	4	C2	S SB	KC-C2 (C6-11)	4	L2	S BE	KC-L2 (C4-6)	4	B2	YE	MK3-B2 (C3-4)	4	F2	YE	MK3-F2 (C1-4)	4	Vss	BL	MK3-Vss (C2-4)
5	—	—	—	5	D1	S YE	KC-D1 (C5-4)	5	F1	S GG	KC-F1 (C5-10)	5	G #1	S YE	KC-G #1 (C6-4)	5	B1	S GG	KC-B1 (C6-10)	5	Vss	S BE S	—	5	A #1	GR	MK3-A #1 (C3-5)	5	E1	GR	MK3-E1 (C1-5)	5	Vss	BL	DC-Vss (C2-2)
				6	Vss	S YE S	—	6	Vss	S GG S	—	6	Vss	S YE S	—	6	Vss	S GG S	—	6	Vss	S BE S	—	6	A #2	BE	MK3-A #2 (C3-6)	6	E2	BE	MK3-E2 (C1-6)				
				7	Vss	S OR S	—	7	Vss	S WH S	—	7	Vss	S OR S	—	7	Vss	S WH S	—	7	Vss	S BE S	—	7	A1	VI	MK3-A1 (C3-7)	7	D #1	VI	MK3-D #1 (C1-7)				
				8	D2	S OR	KC-D2 (C5-3)	8	F2	S WH	KC-F2 (C5-9)	8	G #2	S OR	KC-G #2 (C6-3)	8	B2	S WH	KC-B2 (C6-9)	8	A2	GY	MK3-A2 (C3-8)	8	D #2	GY	MK3-D #2 (C1-8)								
				9	C #1	S RE	KC-C #1 (C5-2)	9	E1	S GY	KC-E1 (C5-8)	9	G1	S RE	KC-G1 (C6-2)	9	A #1	S GY	KC-A #1 (C6-8)	9	G #1	WH	MK3-G #1 (C3-9)	9	D1	WH	MK3-D1 (C1-9)								
				10	Vss	S RE S	—	10	Vss	S GY S	—	10	Vss	S RE S	—	10	Vss	S GY S	—	10	G #2	GG	MK3-G #2 (C3-10)	10	D2	GG	MK3-D2 (C1-10)								
				11	Vss	S BR S	—	11	Vss	S VI S	—	11	Vss	S BR S	—	11	Vss	S VI S	—	11	G1	SB	MK3-G1 (C3-11)												
				12	C #2	S BR	KC-C #2 (C5-1)	12	E2	S VI	KC-E2 (C5-7)	12	G2	S BR	KC-G2 (C6-1)	12	A #2	S VI	KC-A #2 (C6-7)	12	G2	PK	MK3-G2 (C3-12)												

(Notes)

- Circuit Board : LC86100 \square
- Diodes
D65 ~ 80 : 1S1555

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MK1(GS1), MK4(GS2) Circuit Board & Wiring



C9	
5	Vss
4	Vss
3	Vss
2	C#2
1	C#1

C8	
10	D2
9	D1
8	D#2
7	D#1
6	E2
5	E1
4	F2
3	F1
2	F#2
1	F#1

C7	
12	G2
11	G1
10	G#2
9	G#1
8	A2
7	A1
6	A#2
5	A#1
4	B2
3	B1
2	C2
1	C1

C5			
Pin No.	Pin Name	Wire Color	Destination
1	C1	SPK	KC-C1 (C6-12)
2	Vss	SPK S	
3	Vss	SSB S	
4	C2	SSB	KC-C2 (C6-11)
5	B1	SGG	KC-B1 (C6-10)
6	Vss	GG S	
7	Vss	SWH S	
8	B2	SWH	KC-B2 (C6-9)
9	A#1	SGY	KC-A#1 (C6-8)
10	Vss	GY S	
11	Vss	VIS	
12	A#2	SVI	KC-A#2 (C6-7)

C6			
Pin No.	Pin Name	Wire Color	Destination
1	Vss	—	—
2	L3	SGR	KC-L3 (C4-6)
3	Vss	GR S	
4	L2	SBE	KC-L2 (C4-6)
5	Vss	BE S	

C7			
Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK2-C1 (C3-1)
2	C2	RE	MK2-C2 (C3-2)
3	B1	OR	MK2-B1 (C3-3)
4	B2	YE	MK2-B2 (C3-4)
5	A#1	GR	MK2-A#1 (C3-6)
6	A#2	BE	MK2-A#2 (C3-6)
7	A1	VI	MK2-A1 (C3-7)
8	A2	GY	MK2-A2 (C3-8)
9	G#1	WH	MK2-G#1 (C3-9)
10	G#2	GG	MK2-G#2 (C3-10)
11	G1	SB	MK2-G1 (C3-11)
12	G2	PK	MK2-G2 (C3-12)

C8			
Pin No.	Pin Name	Wire Color	Destination
1	F#1	BR	MK2-F#1 (C1-1)
2	F#2	RE	MK2-F#2 (C1-2)
3	F1	OR	MK2-F1 (C1-3)
4	F2	YE	MK2-F2 (C1-4)
5	E1	GR	MK2-E1 (C1-6)
6	E2	BE	MK2-E2 (C1-6)
7	D#1	VI	MK2-D#1 (C1-7)
8	D#2	GY	MK2-D#2 (C1-8)
9	D1	WH	MK2-D1 (C1-9)
10	D2	GG	MK2-D2 (C1-10)

C9			
Pin No.	Pin Name	Wire Color	Destination
1	C#1	SB	MK2-C#1 (C2-1)
2	C#2	PK	MK2-C#2 (C2-2)
3	Vss	BL	MK2-Vss (C2-3)
4	Vss	BL	MK2-Vss (C2-4)
5	Vss	BL	DC-Vss (C1-2)

- (Notes)
- Circuit Board : LC86100 □
 - Diodes
D1 ~ 80 : 1S1555
 - Connector
C1, 6, 9 : 5P (T, E)
C2 ~ 5, 7 : 12P (T, E)
C8 : 10P (T, E)

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C5			
Pin No.	Pin Name	Wire Color	Destination
1	C1	SPK	KC-C1 (C6-12)
2	Vss	SPK S	
3	Vss	SSB S	
4	C2	SSB	KC-C2 (C6-11)
5	B1	SGG	KC-B1 (C6-10)
6	Vss	GG S	
7	Vss	SWH S	
8	B2	SWH	KC-B2 (C6-9)
9	A#1	SGY	KC-A#1 (C6-8)
10	Vss	GY S	
11	Vss	VIS	
12	A#2	SVI	KC-A#2 (C6-7)

C6			
Pin No.	Pin Name	Wire Color	Destination
1	Vss	—	—
2	L3	SGR	KC-L3 (C4-6)
3	Vss	GR S	
4	L2	SBE	KC-L2 (C4-6)
5	Vss	BE S	

C7			
Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK3-C1 (C3-1)
2	C2	RE	MK3-C2 (C3-2)
3	B1	OR	MK3-B1 (C3-3)
4	B2	YE	MK3-B2 (C3-4)
5	A#1	GR	MK3-A#1 (C3-6)
6	A#2	BE	MK3-A#2 (C3-6)
7	A1	VI	MK3-A1 (C3-7)
8	A2	GY	MK3-A2 (C3-8)
9	G#1	WH	MK3-G#1 (C3-9)
10	G#2	GG	MK3-G#2 (C3-10)
11	G1	SB	MK3-G1 (C3-11)
12	G2	PK	MK3-G2 (C3-12)

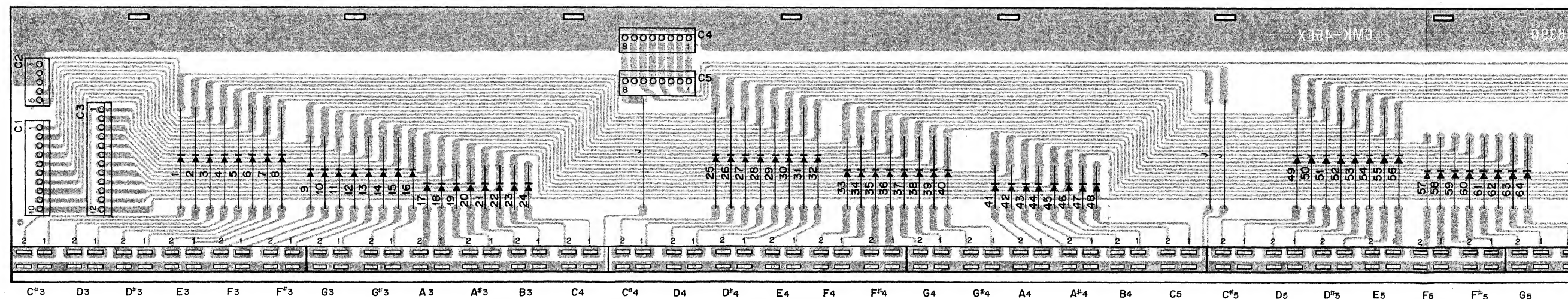
C8			
Pin No.	Pin Name	Wire Color	Destination
1	F#1	BR	MK3-F#1 (C1-1)
2	F#2	RE	MK3-F#2 (C1-2)
3	F1	OR	MK3-F1 (C1-3)
4	F2	YE	MK3-F2 (C1-4)
5	E1	GR	MK3-E1 (C1-6)
6	E2	BE	MK3-E2 (C1-6)
7	D#1	VI	MK3-D#1 (C1-7)
8	D#2	GY	MK3-D#2 (C1-8)
9	D1	WH	MK3-D1 (C1-9)
10	D2	GG	MK3-D2 (C1-10)

C9			
Pin No.	Pin Name	Wire Color	Destination
1	C#1	SB	MK3-C#1 (C2-1)
2	C#2	PK	MK3-C#2 (C2-2)
3	Vss	BL	MK3-Vss (C2-3)
4	Vss	BL	MK3-Vss (C2-4)
5	Vss	BL	DC-Vss (C2-2)

- (Notes)
- Circuit Board : LC86100 □
 - Diodes
D65 ~ 80 : 1S1555

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View from the component side of the circuit board



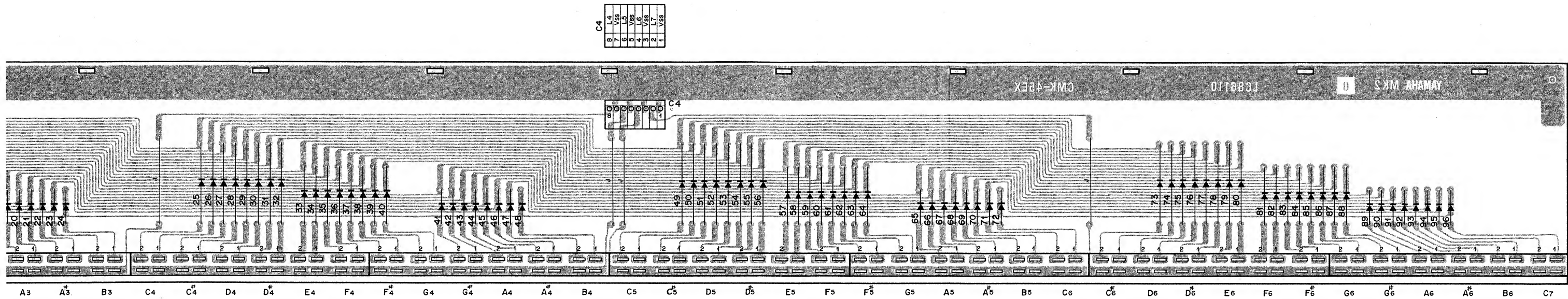
GS2

C4

Pin No.	Pin Name	Wire Color	Destination
1	Vss	S BR S	
2	L7	S BR	KC-L7 (C4-1)
3	Vss	S RE S	
4	L6	S RE	KC-L6 (C4-2)
5	Vss	S OR S	
6	L5	S OR	KC-L5 (C4-3)
7	Vss	S YE S	
8	L4	S YE	KC-L4 (C4-4)

C4 : 8P (T, E)

MK2(GS1), MK3(GS2) Circuit Board & Wiring



GS2

Destination
KC-L7 (C4-1)
KC-L6 (C4-2)
KC-L5 (C4-3)
KC-L4 (C4-4)

- (Notes)
- 1. Circuit Board : LC86110 0
 - 2. Diodes
D1 ~ 96 : 1S1555
 - 3. Connector
C1 : 10P (T, E)
C2 : 5P (T, E)
C3 : 12P (T, E)
C4 : 8P (T, E)

Pin No.	Pin Name	Wire Color	Destination
1	F#1	BR	MK4-F#1 (C8-1)
2	F#2	RE	MK4-F#2 (C8-2)
3	F1	OR	MK4-F1 (C8-3)
4	F2	YE	MK4-F2 (C8-4)
5	E1	GR	MK4-E1 (C8-5)
6	E2	BE	MK4-E2 (C8-6)
7	D#1	VI	MK4-D#1 (C8-7)
8	D#2	GY	MK4-D#2 (C8-8)
9	D1	WH	MK4-D1 (C8-9)
10	D2	GG	MK4-D2 (C8-10)

Pin No.	Pin Name	Wire Color	Destination
1	C#1	SB	MK4-C#1 (C9-1)
2	C#2	PK	MK4-C#2 (C9-2)
3	Vss	BL	MK4-Vss (C9-3)
4	Vss	BL	MK4-Vss (C9-4)
5	Vss	-	-

Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK4-C1 (C7-1)
2	C2	RE	MK4-C2 (C7-2)
3	B1	OR	MK4-B1 (C7-3)
4	B2	YE	MK4-B2 (C7-4)
5	A#1	GR	MK4-A#1 (C7-5)
6	A#2	BE	MK4-A#2 (C7-6)
7	A1	VI	MK4-A1 (C7-7)
8	A2	GY	MK4-A2 (C7-8)
9	G#1	WH	MK4-G#1 (C7-9)
10	G#2	GG	MK4-G#2 (C7-10)
11	G1	SB	MK4-G1 (C7-11)
12	G2	PK	MK4-G2 (C7-12)

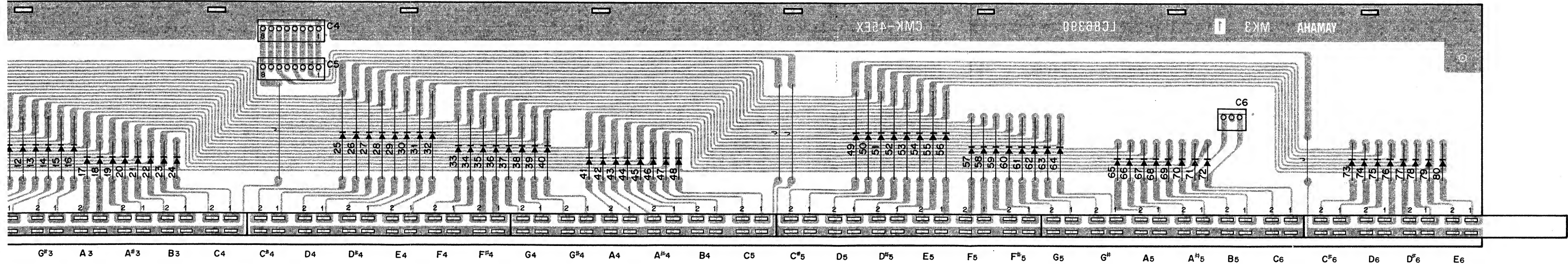
Pin No.	Pin Name	Wire Color	Destination
1	Vss	S BR S	
2	L7	S BR S	KC-L7 (C4-1)
3	Vss	S RE S	
4	L6	S RE S	KC-L6 (C4-2)
5	Vss	S OR S	
6	L5	S OR S	KC-L5 (C4-3)
7	Vss	S YE S	
8	L4	S YE S	KC-L4 (C4-4)

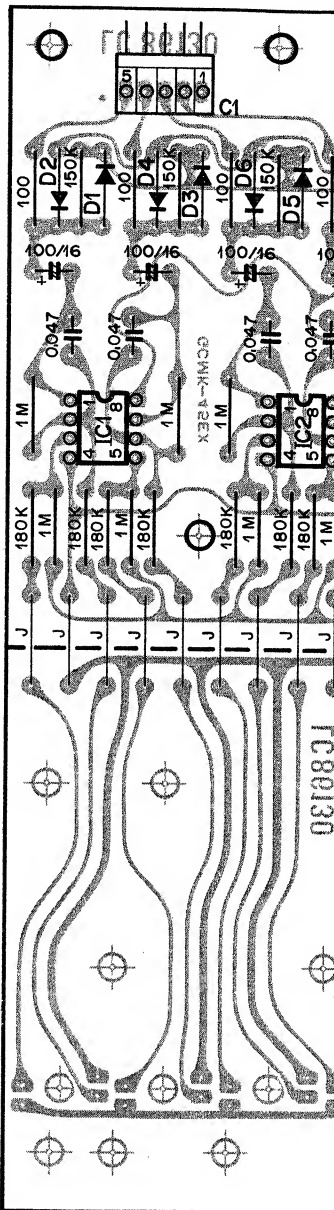
Pin No.	Pin Name	Wire Color	Destination
1	Vss		TEST POINT
2	L7		TEST POINT
3	Vss		TEST POINT
4	L6		TEST POINT
5	Vss		TEST POINT
6	L5		TEST POINT
7	Vss		TEST POINT
8	L4		TEST POINT

Pin No.	Pin Name	Wire Color	Destination
1	CM1	-	TEST POINT
2	-	-	-
3	CM2	-	TEST POINT

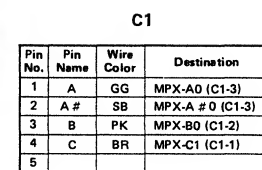
- (Notes)
- 1. Circuit Board : LC86390 1
 - 2. Diodes
D1 ~ 80 : 1S1555
 - 3. NH Connector
C1 : 10P (T, E)
C2 : 5P (T, E)
C3 : 12P (T, E)
C4 : 8P (T, E)

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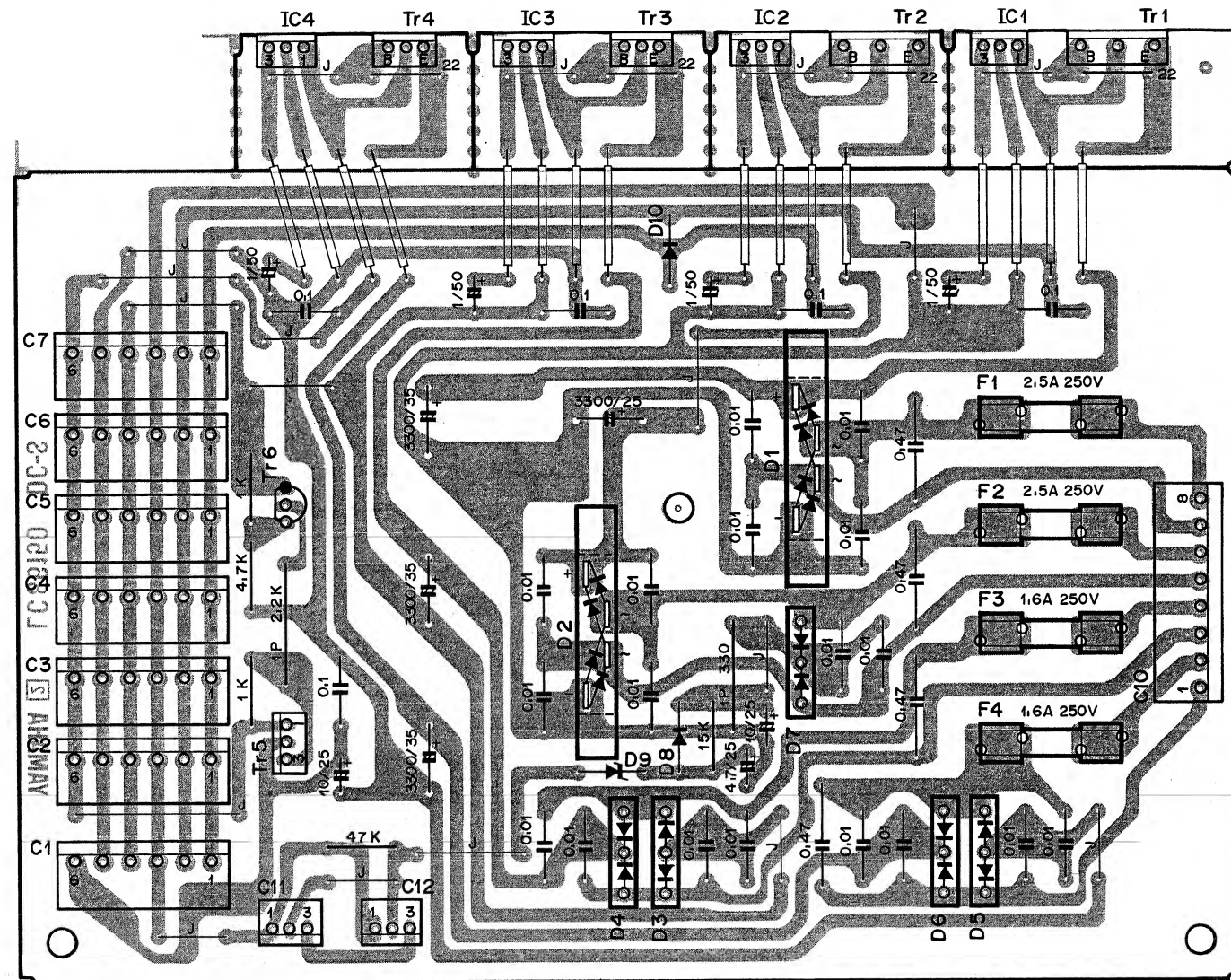


KEP-NA80700 \triangle

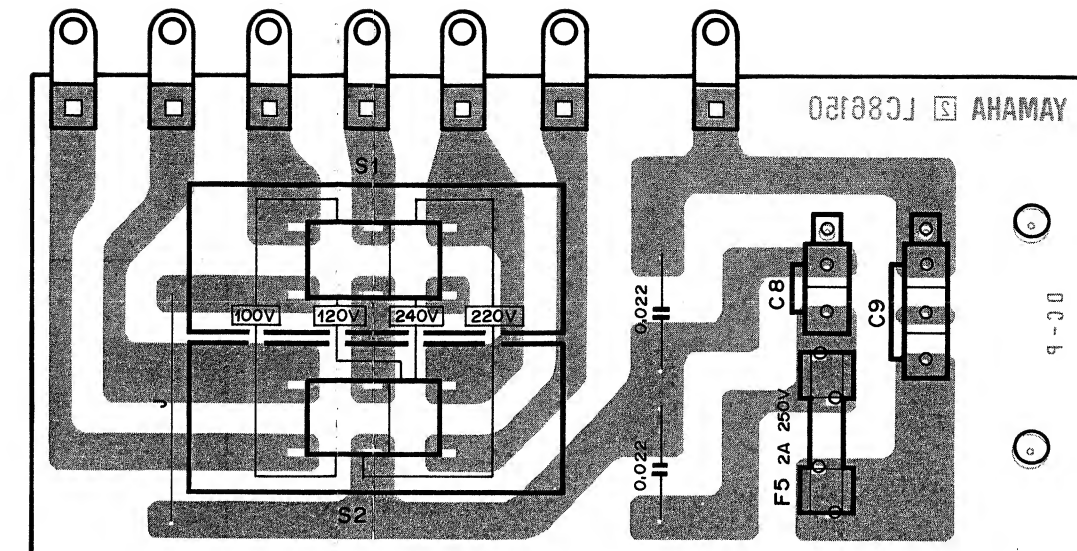
Pin No.	Pin Name	Wire Color	Destination
1	G #	WH	MPX-G #6 (C7-5)
2	A #	GG	MPX-A#6 (C7-4)
3	A #	SB	MPX-A # 6 (C7-3)
4	B	PK	MPX-B#6 (C7-2)
5	C	BR	MPX-C7 (C7-1)
6	IC	GY	PCA5-IC (C3-7)
7	IC	GY	PCA7-IC (C3-6)

KEP-NA80700

DC Circuit Board & Wiring



View from the component side of the circuit board



View from the component side of the circuit board

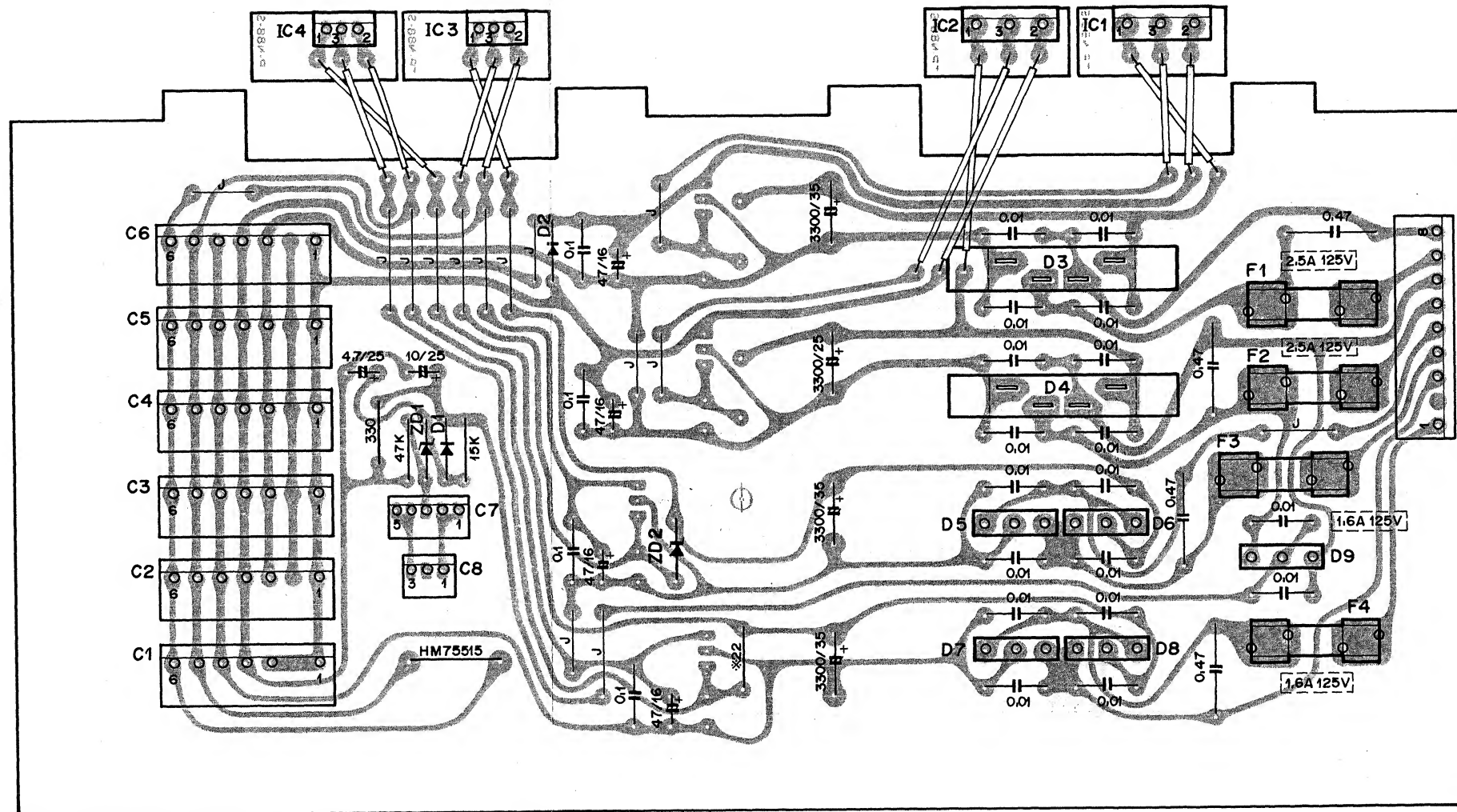
(Notes)

1. Circuit Board : LC86150 ②
2. Transistors
 Tr1, 2 : 2SB686 (R, O)
 Tr3, 4, 5 : 2SB595 (O, Y)
 Tr6 : 2SC509 (O, Y)
3. IC
 IC1 : μ PC14312H
 IC2 : μ PC14305H
 IC3, 4 : μ PC14315H
4. Diodes
 D1, 2 : 5B2
 D3, 5 : 1D2Z1
 D4, 6, 7 : 1D2C1
 D8, 10 : 10E-1
 D9 : RD3.6EB1

5. * marked : Spark killer PME265 (2)
6. Resistor
 * marked :
7. Connector
 C1 ~ 7 : # 5273-06
 C8 : LB-02
 C9 : LB-03
 C10 : # 5273-08
 C11, 12 : NH Connector 3P (T, E)

C1				C2				C3				C4				C5				C6				C7				C8				C10				C11			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	CR-M5V (C2-3)	1	-7	GR	LED-3	1	-7	GR	RW-7 (C8-1)	1	-7	GR	MPX-7 (C9-1)	1	-7	—	—	1	-7	—	—	1	-7	GR	KC-7 (C7-1)	1	PSW1	BR	PSW-1	1	-12	BE	RW-12 (C9-1)	1	-12	BE	RW-12 (C9-1)
2	Vss	BL	MK1-Vss (C9-5)	2	Vss	BL	CNB-Vss (C3-2)	2	Vss	BL	RW-Vss (C8-2)	2	Vss	BL	MPX-Vss (C9-2)	2	Vss	BL	FM2-Vss (C2-2)	2	Vss	BL	FM-Vss (C2-2)	2	Vss	BL	KC-Vss (C7-2)	2	PSW2	BR	PSW-2	2	PON	PK	RW-PON (C9-2)	2	PON	PK	RW-PON (C9-2)
3	-12	BE	CR-MG (C2-1)	3	-12	BE	CNB-12 (C3-3)	3	-12	BE	RW-12 (C8-3)	3	-12	BE	MPX-12 (C9-3)	3	-12	BE	FM2-12 (C2-3)	3	-12	BE	FM1-12 (C2-3)	3	-12	BE	KC-12 (C7-3)	3	—	—	—	3	-7B	VI	RW-7B (C9-3)	3	-7B	VI	RW-7B (C9-3)
4	-15	—	—	4	-15	BR	CNB-15 (C3-4)	4	-15	—	—	4	-15	BR	MPX-15 (C9-4)	4	-15	BR	FM2-15 (C2-4)	4	-15	BR	FM1-15 (C2-4)	4	-15	—	—	4	—	—	—	4	—	—	—	4	—	—	—
5	E	—	—	5	E	BL	CNB-E (C3-5)	5	E	—	—	5	E	BL	MPX-E (C9-5)	5	E	BL	FM2-E (C2-5)	5	E	BL	FM1-E (C2-5)	5	E	BL	KC-E (C7-5)	5	—	—	—	5	—	—	—	5	—	—	—
6	+15S	RE	CNB+15S (C3-1)	6	+15	OR	CNB+15 (C3-6)	6	+15	—	—	6	+15	OR	MPX+15 (C9-6)	6	+15	OR	FM2+15 (C2-6)	6	+15	OR	FM1+15 (C2-6)	6	+15	OR	KC+15 (C7-6)	6	—	—	—	6	—	—	—	6	—	—	—







DC Circuit Board & Wiring



View from the component side of the circuit board

(Notes)

1. Circuit Board : LC86380 ①
2. Transistor
 - Tr1, 2 : 2SB686 (R, O)
 - Tr3, 4 : 2SB595 (O, Y)
3. IC
 - IC1 : μ PC14312H
 - IC2 : μ PC14305H
 - IC3, 4 : μ PC14315H
4. Diode
 - D1, 2 : 10E-1
 - D5, 4 : 5B2
 - D5, 7 : 1D2Z1
 - D6, 8, 9 : 1D2C1
5. Zener Diode
 - ZD1 : RD3.6EB1
 - ZD2 : RD6.2EB

Common Model	F1, F2	F3, F4	NA Number
US. American Canadian	 2.1A 125V	 1.6A 125V	80746
Japan	 2.5A 250V	 1.6A 250V	80739
North European General Export	 T2.5A 250V	 T1.6A 250V	80747

C1

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	SELL-7 (C3-2)
2	Vss	—	—
3	-12	BE	SELL-12 (C1-5)
4	-15	—	—
5	Vss	BL	SELL-Vss (C1-2)
6	+15	—	—

C2

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	CR-M5V (C2-3)
2	V _{ss}	BL	MK4-V _{ss} (C9-5)
3	-12	BE	CR-MG (C2-1)
4	-15	BR	EQ-15 (C2-2)
5	E	BL	EQ-E (C2-5)
6	+15	OR	EQ-+15 (C2-3)

C3

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	STO-7 (C1-2)
2	Vss	-	-
3	-12	BE	A-12 (C10-1)
4	-15	BR	A-15 (C10-2)
5	E	BL	A-E (C10-6)
6	+15	OR	A+15 (C10-7)

C4

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	RW- -7 (C8-1)
2	Vss	BL	RW-Vss (C8-2)
3	-12	BE	RW- -12 (C8-3)
4	-15	-	-
5	E	-	-
6	+15	-	-

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	SELR- -7 (C1-2)
2	Vss	BL	FM-Vss (C2-2)
3	-12	BE	FM- -12 (C2-3)
4	-15	BR	FM- -15 (C2-6)
5	E	BL	FM-E (C2-5)
6	+15	OR	FM+15 (C2-4)

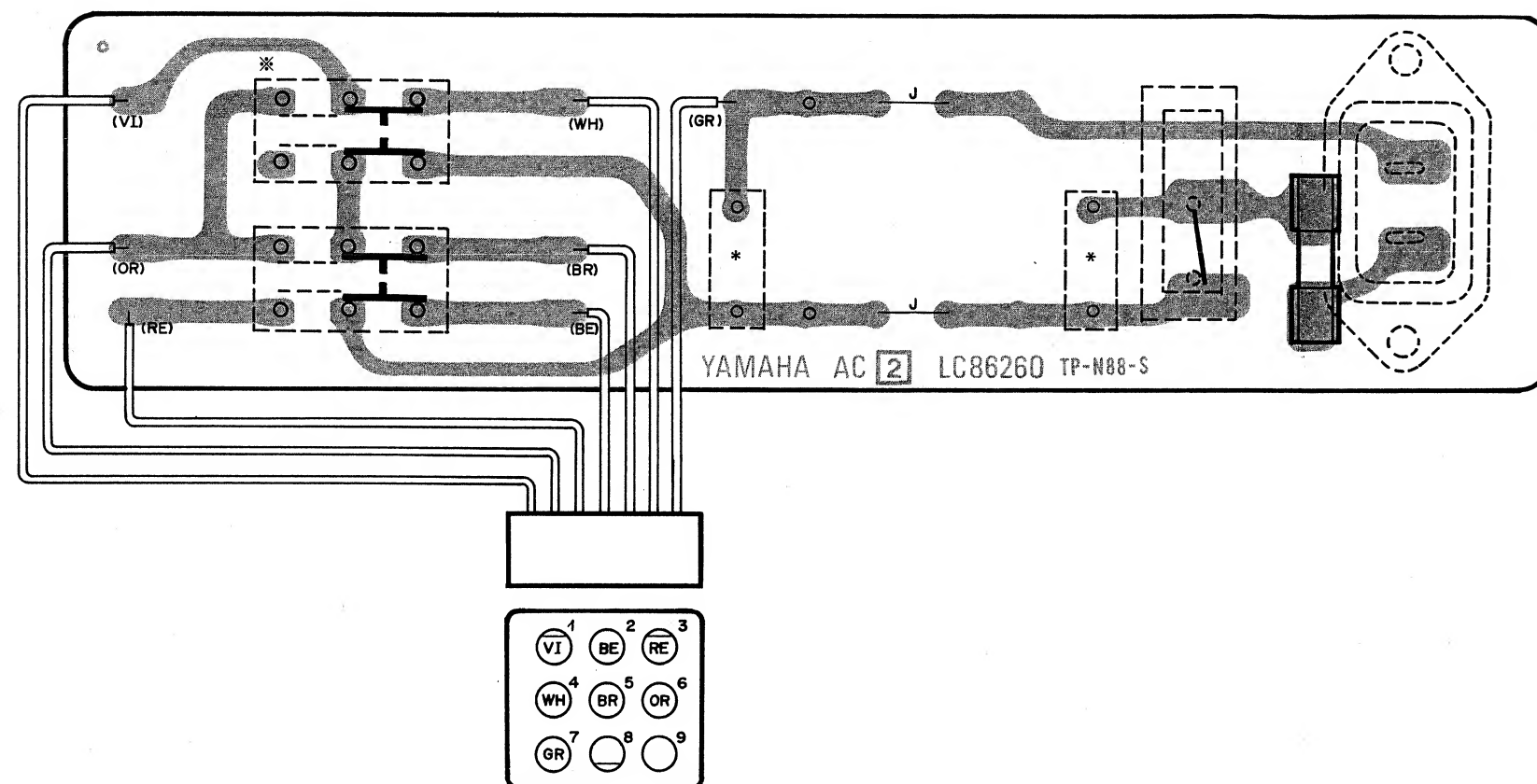
Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	KC-7 (C7-1)
2	V _{ss}	BL	KC-V _{ss} (C7-2)
3	-12	BE	KC-12 (C7-3)
4	-15	—	—
5	E	BL	KC-E (C7-5)
6	+15	OR	KC+15 (C7-6)

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	RW- -12 (C9-1)
2	-	-	-
3	PON	GR	RW-PON (C9-2)
4	-	-	-
5	-7B	V1	RW- -7B (C9-3)

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	BB UNIT (-)
2	-	-	-
3	-7B	V1	BB UNIT (+)

AC Circuit Board & Wiring

AC (General Export Model)



View from the printed pattern side of the circuit board.

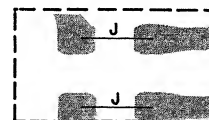
(Notes)

1. Circuit Board : LC86260
2. Capacitor
(*) marked : Spark Killer Capacitor 250V/0.022 μ F
3. Fuse

Common Model	NA No.	Fuse
General Export	NA80734	T1.6A 250V
US, American Canadian	NA80733	1.6A 125V
Japan	NA80735	1.6A 250V

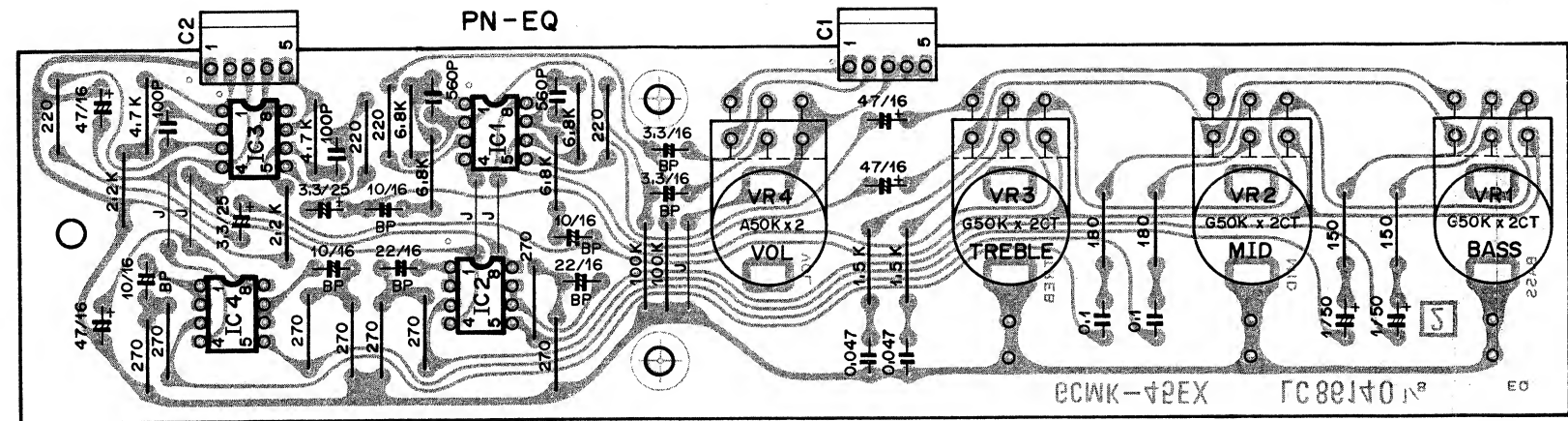
KEP-NA80733-07
 KEP-NA80734-07
 KEP-NA80735-07

※ U.S. American & Canadian Model



PN (EQ, SEL-R, SEL-L, TET) Circuit Board & Wiring

EQ



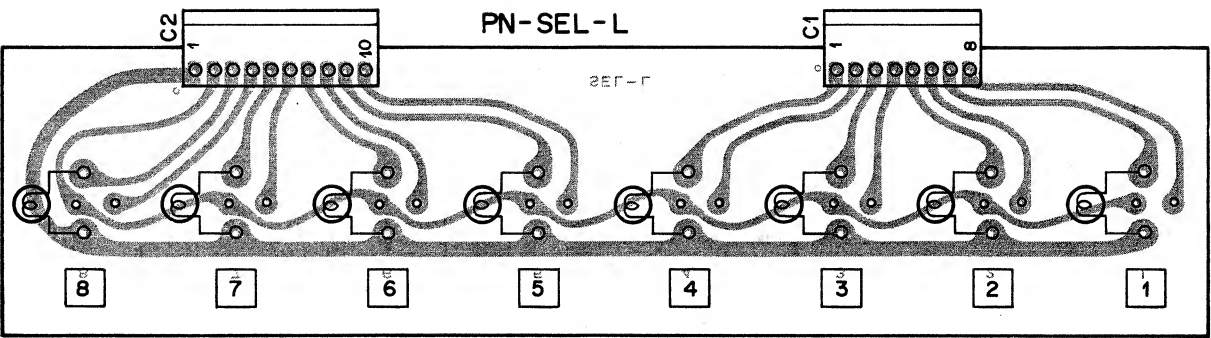
View from the component side of the circuit board

C1				C2			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	EQ12	S YE	A-EQ2 (C5-10)	1	E	BL	CNB-E (C1-4)
2	EQ11	S OR	A-EQ1 (C5-6)	2	EQ01	S RE	A-TRM1 (C4-7)
3	E	-	-	3	-15	BR	CNB-15 (C1-2)
4	E	-	-	4	+15	OR	CNB+15 (C1-8)
5	E	BL	EQ-EP	5	EQ02	S BR	A-TRM2 (C4-5)

- (Notes)
1. Circuit Board : LC86140 2/1/7
 2. IC
IC1 ~ 4 : NJM4558DV
 3. Connector
C1, 2 : NH Connector 5P (B, E)

KEP-NA80702-04 ▲

SEL-L



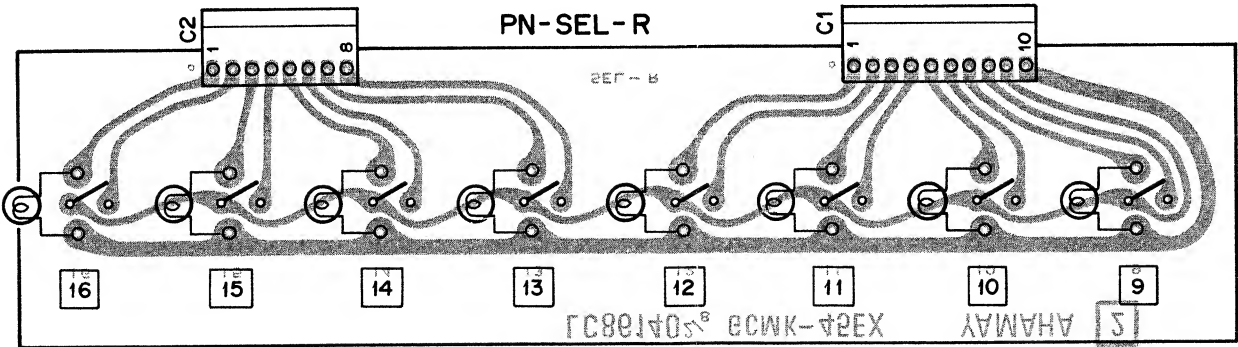
View from the component side of the circuit board

C1				C2			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	L4	GY	RW-L4 (C1-8)	1	Vss	BL	RW-Vss (C2-10)
2	S4	VI	RW-S4 (C1-7)	2	STO	GG	RW-STO (C2-9)
3	L3	BE	RW-L3 (C1-6)	3	L8	GY	RW-L8 (C2-8)
4	S3	GR	RW-S3 (C1-5)	4	S8	VI	RW-S8 (C2-7)
5	L2	YE	RW-L2 (C1-4)	5	L7	BE	RW-L7 (C2-6)
6	S2	OR	RW-S2 (C1-3)	6	S7	GR	RW-S7 (C2-5)
7	L1	RE	RW-L1 (C1-2)	7	L6	YE	RW-L6 (C2-4)
8	S1	BR	RW-S1 (C1-1)	8	S6	OR	RW-S6 (C2-3)
				9	L5	RE	RW-L5 (C2-2)
				10	S5	BR	RW-S5 (C2-1)

- (Notes)
1. Circuit Board : LC86140 2/3/7
 2. Connector
C1 : NH Connector 8P (B, E)
C2 : NH Connector 10P (B, E)

KEP-NA80705-04 ▲

SEL-R



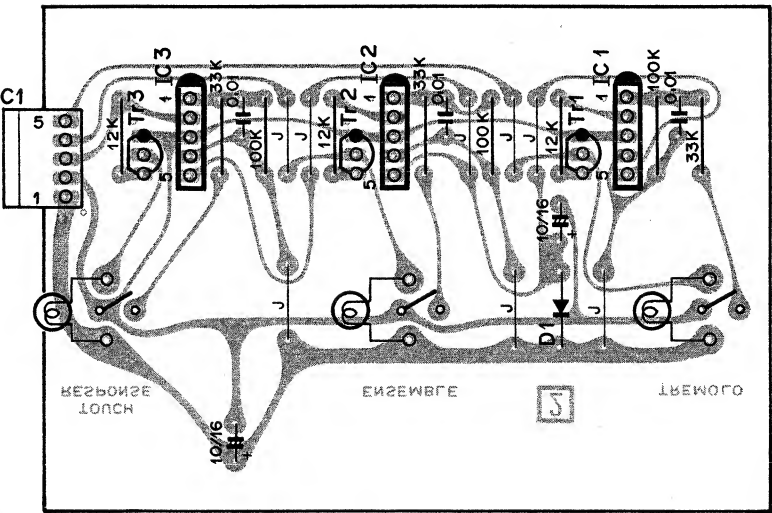
View from the component side of the circuit board

C1				C2			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	L12	GY	RW-L12 (C3-8)	1	L16	GY	RW-L16 (C4-8)
2	S4	VI	RW-S4 (C3-7)	2	S8	VI	RW-S8 (C4-7)
3	L11	BE	RW-L11 (C3-6)	3	L15	BE	RW-L15 (C4-6)
4	S3	GR	RW-S3 (C3-5)	4	S7	GR	RW-S7 (C4-5)
5	L10	YE	RW-L10 (C3-4)	5	L14	YE	RW-L14 (C4-4)
6	S2	OR	RW-S2 (C3-3)	6	S6	OR	RW-S6 (C4-3)
7	L9	RE	RW-L9 (C3-2)	7	L13	RE	RW-L13 (C4-2)
8	S1	BR	RW-S1 (C3-1)	8	S5	BR	RW-S5 (C4-1)
9	ST1	PK	RW-ST1 (C4-9)				
10	Vss	BL	RW-Vss (C4-10)				

- (Notes)
1. Circuit Board : LC86140 2/2/7
 2. Connector
C1 : NH Connector 10P (B, E)
C2 : NH Connector 8P (B, E)

KEP-NA80703-04 ▲

TET



View from the component side of the circuit board

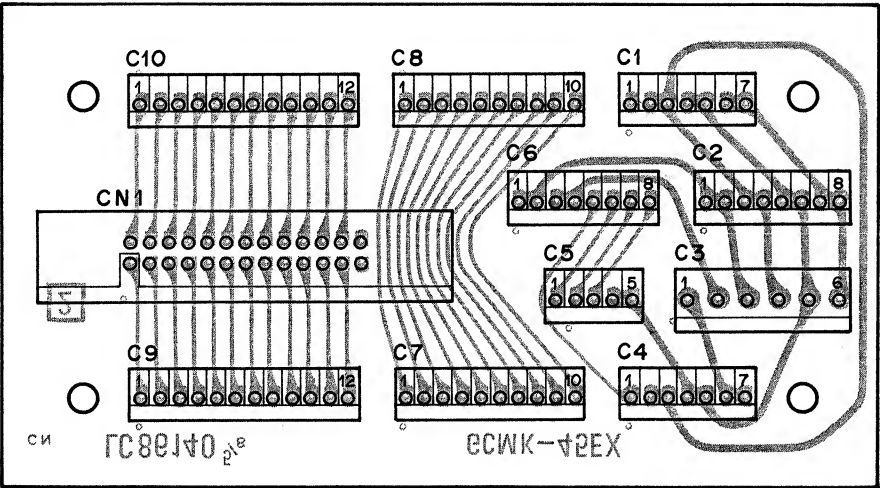
C1			
Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	CNB-Vss (C6-3)
2	-12	BE	CNB-12 (C6-1)
3	TRS	RE	KC-PS2 (C3-2)
4	ENS	GR	A-ENSS (C5-8)
5	TRM	BE	A-TRMSW (C6-6)

- (Notes)
1. Circuit Board : LC86140 2/4/7
 2. Transistors
Tr1 ~ 3 : 2SC509 (O, Y)
 3. IC
IC1 ~ 3 : BA634
 4. Diode
D1 : 1S1555 (1S2473)
 5. Connector
C1 : NH Connector 5P (B, E)

KEP-NA80705-04 ▲

PN (CN, DET, EFF) Circuit Board & Wiring

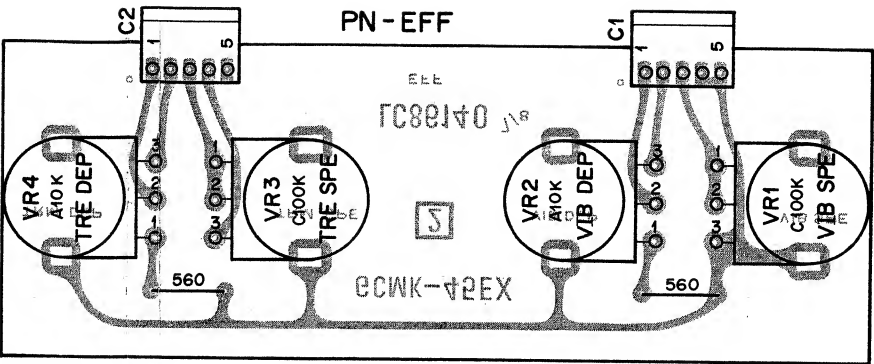
CN



View from the component side of the circuit board

- (Notes)
1. Circuit Board : LC86140 2/5/7
 2. Connector
- C1, 4 : NH Connector 7P (T, E)
 - C2, 6 : NH Connector 8P (T, E)
 - C5 : NH Connector 5P (T, E)
 - C7, 8 : NH Connector 10P (T, E)
 - C9, 10 : NH Connector 12P (T, E)
 - C3 : Connector 6P (T, E) 3.96 mm
 - CN1 : Bracket cable connector 26P (T, E)

EFF



View from the component side of the circuit board

C1

Pin No.	Pin Name	Wire Color	Destination
1	VDD	GR	A-V1BD1 (C9-4)
2	VDI	BE	A-V1BD1 (C9-7)
3	VSI	VI	A-V1BSP (C9-1)
4	E	BL	A-E (C7-5)
5	E	-	-

- (Notes)
1. Circuit Board : LC86140 2/7/7
 2. Connector
- C1, 2 : NH Connector 5P (B, E)

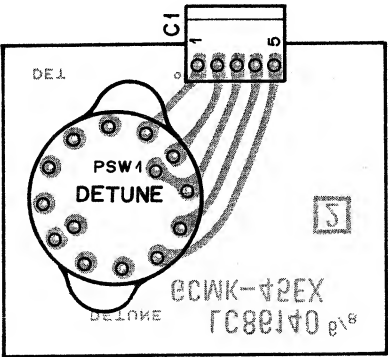
C2

Pin No.	Pin Name	Wire Color	Destination
1	TDO	BR	A-TRMDI (C6-8)
2	TDI	RE	A-TRMDI (C6-1)
3	TSO	OR	A-TRMDI (C6-2)
4	TSI	YE	A-TRMSO (C6-5)
5	-	-	-

KEP-NA80706-04

KEP-NA80708-04

DET



View from the component side of the circuit board

- (Notes)
1. Circuit Board : LC86140 2/6/7
 2. PSW1 : Rotary SW SRM-125
 3. Connector
- C1 : NH Connector 5P (B, E)

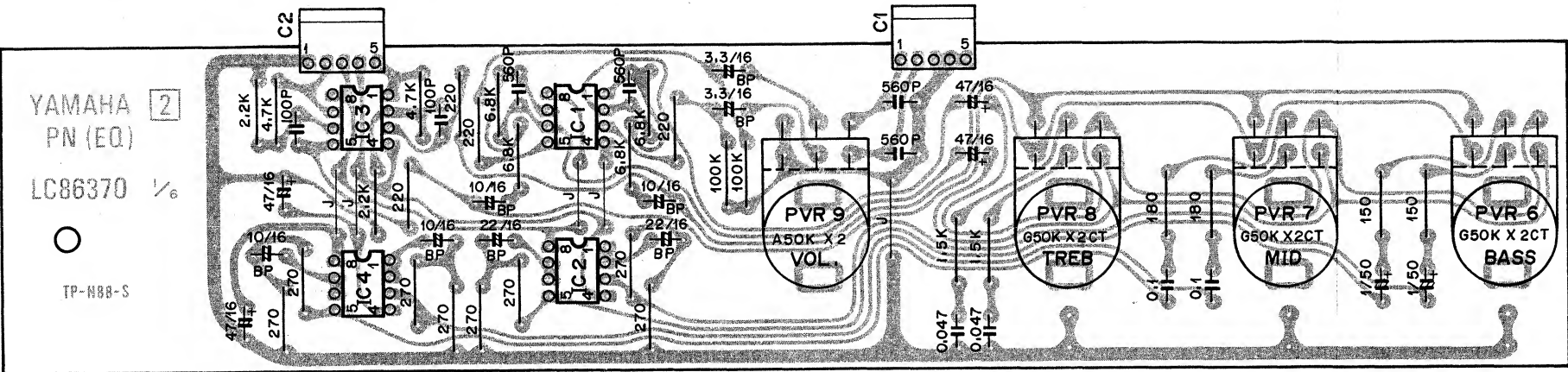
C1

Pin No.	Pin Name	Wire Color	Destination
1	SD2	GR	KC-DP3 (C3-5)
2	SD1	OR	KC-DP1 (C3-3)
3	Vss	BL	KC-PS2 (C1-1)
4	RD1	BE	KC-RP1 (C3-6)
5	RD2	VI	KC-RP2 (C3-7)

KEP-NA80707-04

PN (EQ, SEL-R, SEL-L, EFF, STO) Circuit Board & Wiring

EQ View from the pattern side of the circuit board

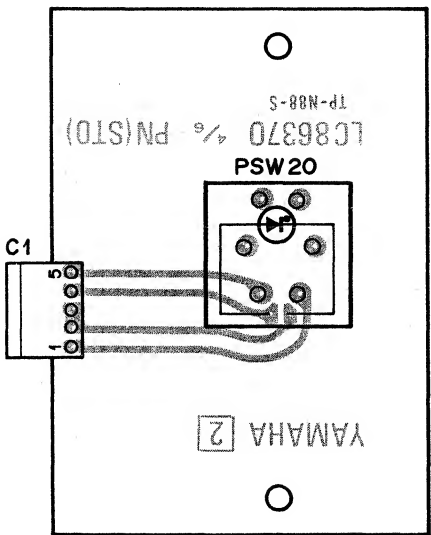


C1			
Pin No.	Pin Name	Wire Color	Destination
1	E	-	-
2	E	-	-
3	E	-	-
4	EO1	S OR	A-EO1 (C5-6)
5	EO2	S YE	A-EO2 (C5-10)

C2			
Pin No.	Pin Name	Wire Color	Destination
1	TRM12	S BR	A-TRM12 (C4-5)
2	-15	BR	DC-15 (C2-4)
3	+15	OR	DC+15 (C2-6)
4	TRM11	S RE	A-TRM11 (C4-7)
5	E	BL	DC-E (C2-5)

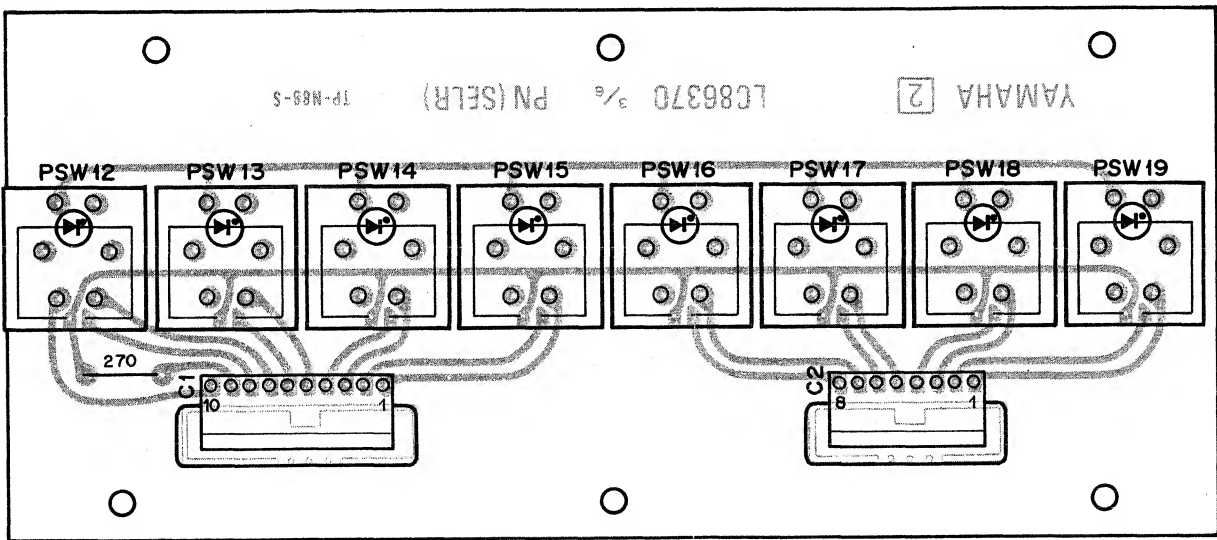
- (Notes)
1. Circuit Board : LC86370 2
 2. IC :
IC1 ~ 4 : NJM4558

STO View from the pattern side of the circuit board



C1			
Pin No.	Pin Name	Wire Color	Destination
1	WRT	WH	RW-WRT (C1-9)
2	-7	GR	DC-7 (C3-1)
3	-	-	-
4	STRD	BR	RW-STRD (C7-1)
5	-12	BE	LOCK SW-LOCK terminal

SEL-R View from the pattern side of the circuit board

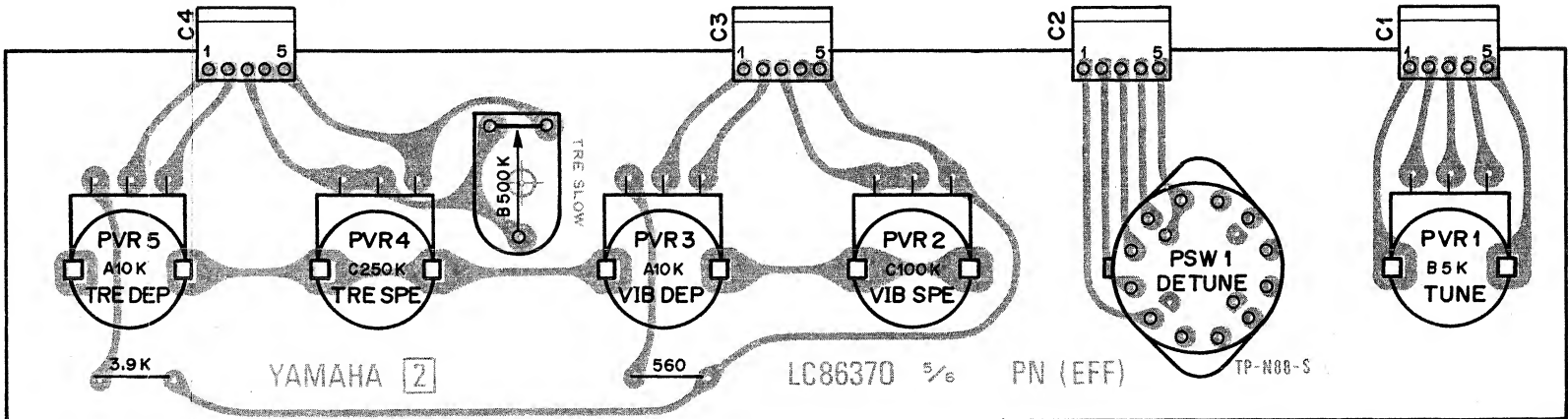


C1			
Pin No.	Pin Name	Wire Color	Destination
1	ST1	PK	RW-ST1 (C4-9)
2	-7	GR	DC-7 (C5-1)
3	L9	RE	RW-L9 (C3-2)
4	S1	BR	RW-S1 (C3-1)
5	L10	YE	RW-L10 (C3-4)
6	S2	OR	RW-S2 (C3-3)
7	L11	BE	RW-L11 (C3-6)
8	S3	GR	RW-S3 (C3-5)
9	L12	GY	RW-L12 (C3-8)
10	S4	VI	RW-S4 (C3-7)

C2			
Pin No.	Pin Name	Wire Color	Destination
1	L13	RE	RW-L13 (C4-2)
2	S5	BR	RW-S5 (C4-1)
3	L14	YE	RW-L14 (C4-4)
4	S6	OR	RW-S6 (C4-3)
5	L15	BE	RW-L15 (C4-6)
6	S7	GR	RW-S7 (C4-5)
7	L16	GY	RW-L16 (C4-8)
8	S8	VI	RW-S8 (C4-7)

- (Note)
1. Circuit Board : LC86370 2

EFF



View from the pattern side of the circuit board

C1			
Pin No.	Pin Name	Wire Color	Destination
1	E	BL	A-E (C7-5)
2	PC3	GR	A-PC3 (C7-1)
3	PC2	OR	A-PC2 (C7-3)
4	PC1	YE	A-PC1 (C7-4)
5	E	BL	EFF-E (C1-1)

C2			
Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	KC-Vss (C1-1)
2	DP1	OR	KC-DP1 (C3-3)
3	DP3	GR	KC-DP3 (C3-5)
4	-	-	-
5	-	-	-

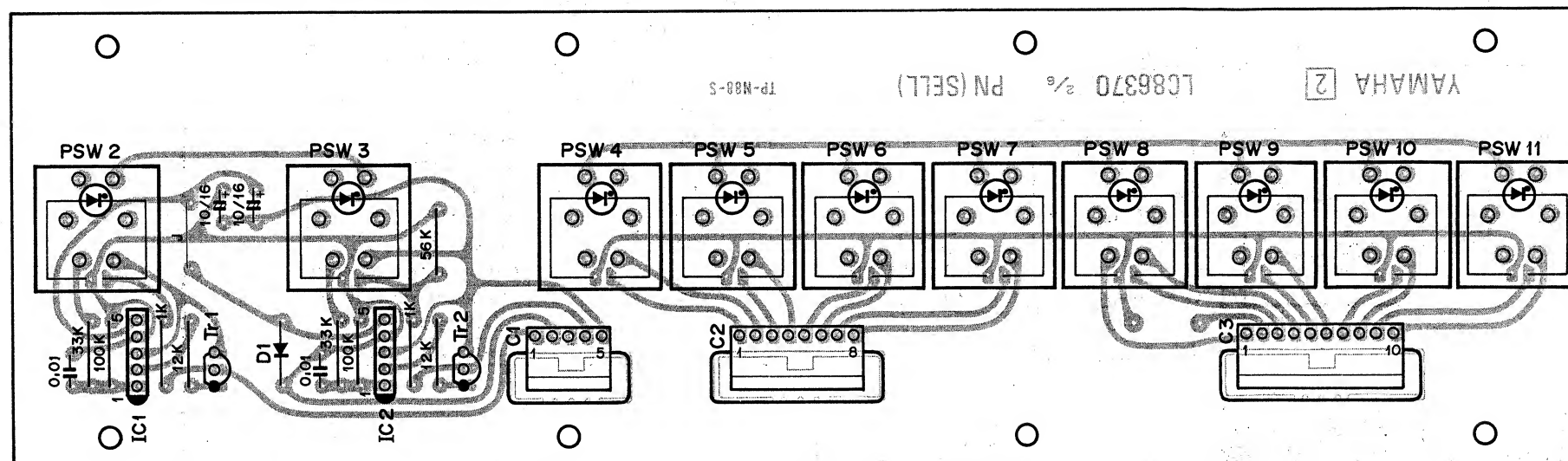
C3			
Pin No.	Pin Name	Wire Color	Destination
1	-	-	-
2	E	BL	PIT-C1-5
3	VIBSP	VI	A-VIBSP (C9-1)
4	VIBDO	BE	A-VIBDO (C9-7)
5	VIBDI	GR	A-VIBDI (C9-4)

C4			
Pin No.	Pin Name	Wire Color	Destination
1	-	-	-
2	TRMSO	YE	A-TRMSO (C6-5)
3	TRMSI	OR	A-TRMSI (C6-2)
4	TRMDO	RE	A-TRMDO (C6-1)
5	TRMDI	BR	A-TRMDI (C6-8)

- (Note)
1. Circuit Board : LC86370 2

SEL-L

View from the pattern side of the circuit board



C1

Pin No.	Pin Name	Wire Color	Destination
1	TRMSW	BE	A-TRMSW (C6-7)
2	Vss	BL	DC-Vss (C1-8)
3	—	—	—
4	ENSS	GR	A-ENSS (C5-8)
5	-12	BE	DC-12 (C1-3)

C2

Pin No.	Pin Name	Wire Color	Destination
1	L1	RE	RW-L1 (C1-2)
2	S1	BR	RW-S1 (C1-1)
3	L2	YE	RW-L2 (C1-4)
4	S2	OR	RW-S2 (C1-3)
5	L3	BE	RW-L3 (C1-6)
6	S3	GR	RW-S3 (C1-5)
7	L4	GY	RW-L4 (C1-8)
8	S4	VI	RW-S4 (C1-7)

C3

Pin No.	Pin Name	Wire Color	Destination
1	STO	GG	RW-STO (C2-9)
2	-7	GR	DC-7 (C1-1)
3	L5	RE	RW-L5 (C2-2)
4	S5	BR	RW-S5 (C2-1)
5	L6	YE	RW-L6 (C2-4)
6	S6	OR	RW-S6 (C2-3)
7	L7	BE	RW-L7 (C2-6)
8	S7	GR	RW-S7 (C2-5)
9	L8	GY	RW-L8 (C2-8)
10	S8	VI	RW-S8 (C2-7)

(Notes)

1. Circuit Board : LC86370 ②
2. IC
IC1, 2 : BA634
3. Tr
Tr1, 2 : 2SC509
4. Diode
D : 1S1555

Other Circuit Boards & Wiring

GS1
CNB

Pin No.	Pin Name	Wire Color	Destination
1	IC	GY	PCA-IC (C3-6)
2	-15	—	—
3	-15	BR	PCA-15 (C2-1)
4	E	—	—
5	E	BL	PCA-E (C2-3)
6	15S	—	—
7	15S	RE	PCA-15 (C2-5)

C4

Pin No.	Pin Name	Wire Color	Destination
1	DAMP	WH	CNP-DAMP (C3-1)
2	TRM	GY	CNP-TREM (C3-2)
3	V18	GG	CNP-V18 (C3-3)
4	E	BL	CNP-E (C3-4)
5	E	BL	CNP-E (C3-5)

C5

Pin No.	Pin Name	Wire Color	Destination
1	-12	8E	TET-12 (C1-2)
2	-12	—	—
3	Vss	BL	TET-Vss (C1-1)
4	Vss	—	—
5	IC	GY	A-IC (C5-3)
6	DAMP	WH	KC-DAMP (C3-9)
7	TRM	GR	A-TRMPD (C5-7)
8	V18	GG	A-V18 (C5-2)

C6

BB

C1

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	DC-12 (C12-1)
2	—	—	—
3	-7B	VI	DC-7B (C12-3)

C7

Pin No.	Pin Name	Wire Color	Destination
1	LIN	VI	A-LIN (C4-3)
2	EXP	BE	A-EXP (C4-1)
3	PC1	YE	A-PC1 (C7-4)
4	PC2	OR	A-PC2 (C7-1)
5	PC3	GR	A-PC3 (C7-1)
6	WRITE	WH	RW-WRITE (C1-9)
7	-12	BE	RW-12 (C1-10)
8	PLK	SB	RW-PLK (C3-9)
9	S1	BB	RW-S1 (C3-10)
10	—	—	—

C8

Pin No.	Pin Name	Wire Color	Destination
1	LIN	BR	CNX-LIN (C1-1)
2	EXP	RE	CNX-EXP (C1-2)
3	PC1	OR	CNX-PC1 (C1-3)
4	PC2	YE	CNX-PC2 (C1-4)
5	PC3	GR	CNX-PC3 (C1-5)
6	WRITE	BE	CNX-WRITE (C1-6)
7	-12	BE	CNX-12 (C1-7)
8	PLK	SB	CNX-PLK (C1-8)
9	S1	—	—
10	—	—	—

C9

Pin No.	Pin Name	Wire Color	Destination
1	G	BR	CNX-G (C3-1)
2	G	RE	CNX-G (C3-2)
3	G	OR	CNX-G (C3-3)
4	READY	YE	CNX-READY (C3-4)
5	CMD1	GR	CNX-CMD1 (C3-5)
6	G	BE	CNX-G (C3-6)
7	G	VI	CNX-G (C3-7)
8	CTRL1	GY	CNX-CTRL1 (C3-8)
9	D1A	WH	CNX-D1A (C3-9)
10	D2A	GG	CNX-D2A (C3-10)
11	D3A	SB	CNX-D3A (C3-11)
12	D4A	PK	CNX-D4A (C3-12)

C10

Pin No.	Pin Name	Wire Color	Destination
1	φA	BR	CNX-φA (C4-1)
2	φB	RE	CNX-φB (C4-2)
3	BUSY	OR	CNX-BUSY (C4-3)
4	CMD0	YE	CNX-CMD0 (C4-4)
5	CMD2	GR	CNX-CMD2 (C4-5)
6	COMR	BE	CNX-COMR (C4-6)
7	CTRL0	VI	CNX-CTRL0 (C4-7)
8	EXT	GY	CNX-EXT (C4-8)
9	D2M	WH	CNX-D2M (C4-9)
10	D3M	GG	CNX-D3M (C4-10)
11	D4M	SB	CNX-D4M (C4-11)
12	G	PK	CNX-G (C4-12)

GS2

PGM

CN No.	CN Name	Destination
CN1	24P connector	(to RW-CN5)

LOCK

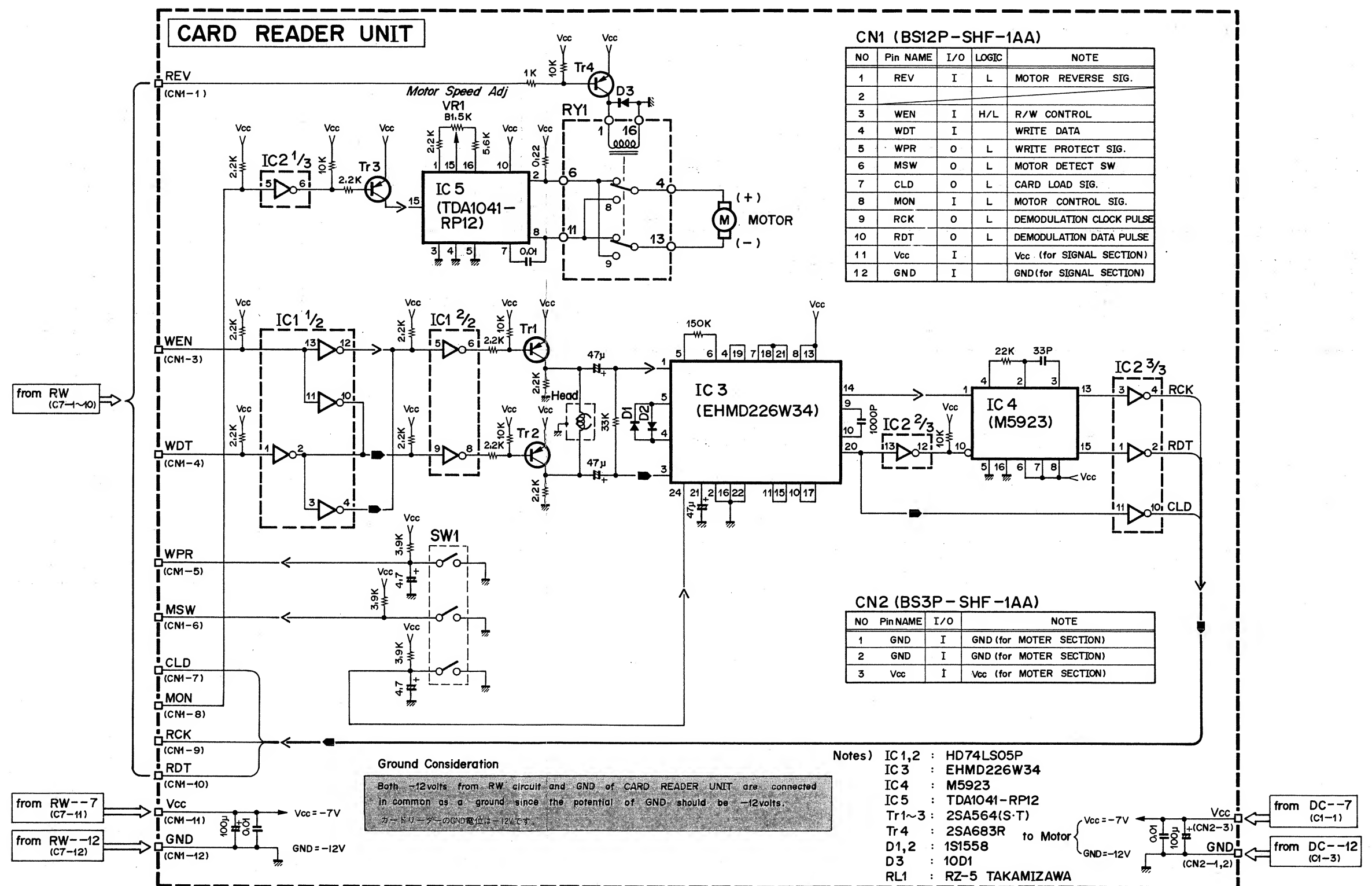
Pin No.	Pin Name	Wire Color	Destination
1	CENTER TERMINAL	WH	RW-PLK (C3-9)
2	LOCK TERMINAL	BE	RW-12 (C1-10)
3	—	BE	STO-12 (C1-5)

BB

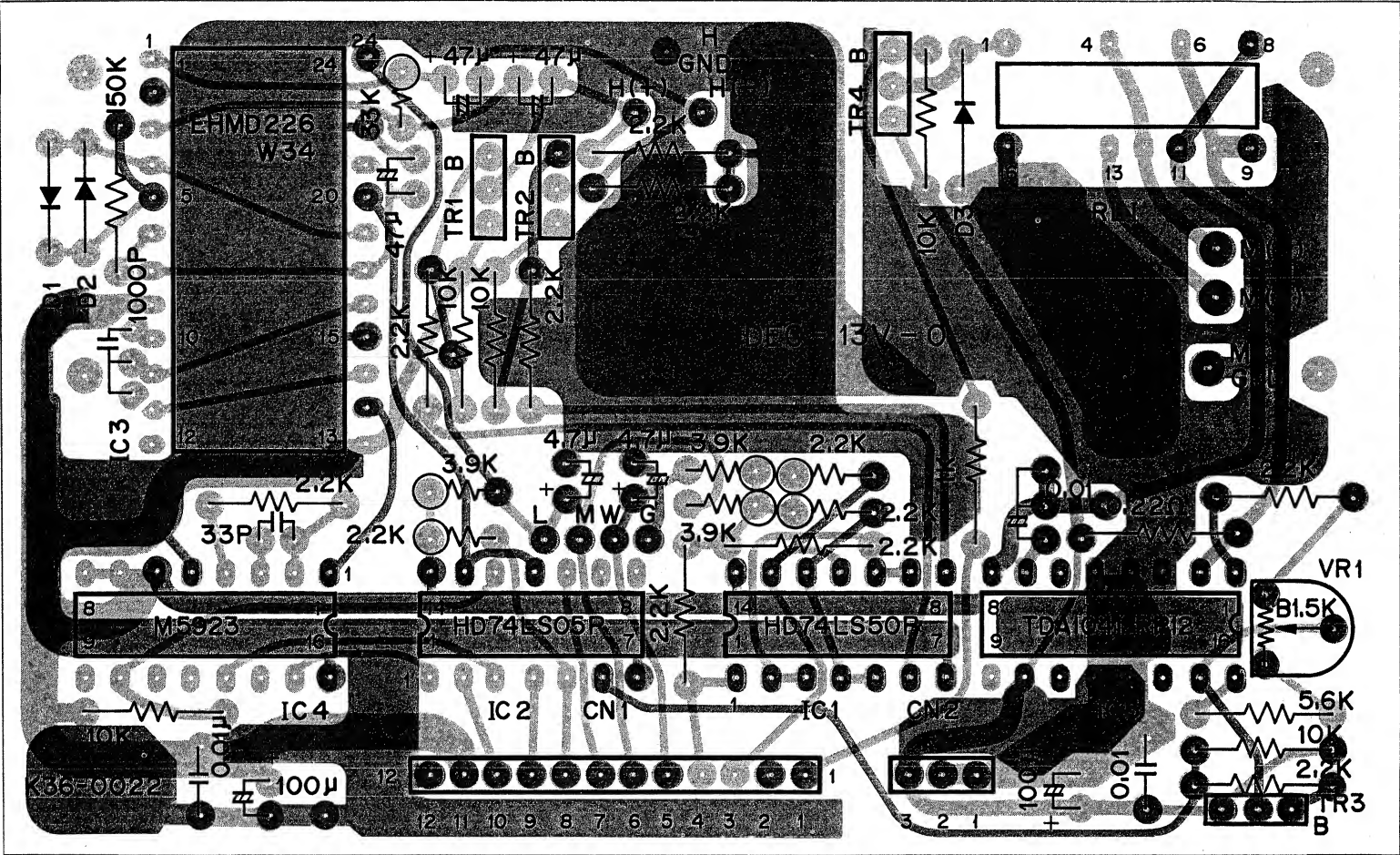
C1

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	-12	BE	DC-12 (C8-1)
3	—	—	—
4	-7B	VI	DC-7B (C8-3)

CARD READER UNIT Circuit Diagram



CARD READER UNIT Circuit Board & Wiring



C1			
Pin No.	Pin Name	Wire Color	Destination
1	REV	RE	RW-REV (C7-2)
2	—	—	—
3	WEN	GR	RW-WEN (C7-5)
4	WDT	BE	RW-WDT (C7-6)
5	WPR	YE	RW-WPR (C7-4)
6	MSW	OR	RW-MSW (C7-3)
7	CLD	VI	RW-CLD (C7-7)
8	MON	GY	RW-MON (C7-8)
9	RCK	WH	RW-RCK (C7-9)
10	RDT	GG	RW-RDK (C7-10)
11	+5V	GR	RW-7 (C7-11)
12	GND	BE	RW-12 (C7-12)

C2			
Pin No.	Pin Name	Wire Color	Destination
1	MG	BE	DC-12 (C1-3)
2	MG	—	—
3	M5V	GR	DC-7 (C1-1)

C1			
Pin No.	Pin Name	Wire Color	Destination
1	REV	RE	RW-REV (C7-2)
2	—	—	—
3	WEN	GR	RW-WEN (C7-5)
4	WDT	RE	RW-WDT (C7-6)
5	WPR	YE	RW-WPR (C7-4)
6	MSW	OR	RW-MSW (C7-3)
7	CLD	VI	RW-CLD (C7-7)
8	MON	GY	RW-MON (C7-8)
9	RCK	WH	RW-RCK (C7-9)
10	RDT	GG	RW-RDI (C7-10)
11	+5V	GR	RW-7 (C7-11)
12	GND	RE	RW-12 (C7-12)

C2			
Pin No.	Pin Name	Wire Color	Destination
1	MG	BE	DC-12 (C2-3)
2	MG	—	—
3	M5V	GR	DC-7 (C2-1)

YAMAHA

GS1

PARTS LIST

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A. Electronic Components (電気部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※	NA 80 69 20	Circuit Board FM #8605	F M シ ー ト		GS2	
※	NA 80 69 30	- do. - KC #8606	K C シ ー ト		GS2	
※	NA 80 69 40	- do. - MPX #8607	M P X シ ー ト			
※	NA 80 69 50	- do. - RW #8608	R W シ ー ト			
※	NA 80 69 60	- do. - A #8609	A シ ー ト		GS2	
※	NA 80 69 70	- do. - MK1 #8610	M K 1 シ ー ト			
※	NA 80 69 80	- do. - MK2 #8611	M K 2 シ ー ト			
※	NA 80 70 10	- do. - DC #8615	D C シ ー ト			J
※	NA 80 74 40	- do. - DC #8615	"			U,C
※	NA 80 74 50	- do. - DC #8615	"			G
※	NA 80 70 20	- do. - PN-EQ #8614	P N - E Q シ ー ト			
※	NA 80 70 30	- do. - PN-SEL-R #8614	P N - S E L - R シ ー ト			
※	NA 80 70 40	- do. - PN-SEL-L #8614	P N - S E L - L シ ー ト			
※	NA 80 70 50	- do. - PN-TET #8614	P N - T E T シ ー ト			
※	NA 80 70 60	- do. - PN-CNB #8614	P N - C N B シ ー ト			
※	NA 80 70 70	- do. - PN-DEF #8614	P N - D E F シ ー ト			
※	NA 80 70 80	- do. - PN-EFF #8614	P N - E F F シ ー ト			
	i G 00 11 80	IC TC4013BP	I C	D Flip-Flop		
	i G 00 12 40	- do. - TC4011BP	"	2-input NAND		
	i G 00 12 50	- do. - TC4027BP	"	J-K Flip-Flop		
	i G 00 13 90	- do. - NJM4558DV	"	OP. Amp		
	i G 00 16 90	- do. - TC4016BP	"	Bilateral SW		
	i G 00 17 20	- do. - TC4069UBP	"	Inverter		
	i G 00 17 70	- do. - TC4051BP	"	8ch Multiplexer		
	i G 00 18 40	- do. - HD7400	"	2-input NANDx4		
	i G 02 60 00	- do. - #02600	"	VCA		
	i G 02 68 10	- do. - HD74LS20P	"	4-input NANDx2		
	i G 02 69 10	- do. - HD74LS00P	"	2-input NANDx4		
	i G 02 70 00	- do. - HD7404P	"	Inverter		
	i G 02 70 10	- do. - HD74LS04P	"	Inverter		
	i G 02 87 00	- do. - μPC14315H	"	+15V Regulator		
	i G 03 29 00	- do. - iG03290	"	BBD Driver		
※	i G 03 32 00	- do. - μPC14312H	"	+12V Regulator		
※	i G 03 33 00	- do. - μPC14305H	"	+5V - do. -		
※	i G 03 34 00	- do. - μPC311C	"	Voltage Comparator		
※	i G 03 35 00	- do. - μPC610D	"	10 bit D/A Converter		
※	i G 03 36 00	- do. - μPC624	"	8 bit - do. -		
	i G 03 55 00	- do. - TC4028BP	"	Decoder		
	i G 03 81 00	- do. - TC4024BP	"	Counter		
※	i G 04 35 00	- do. - TC40161BP	"	Programmable 4 bit Counter		
※	i G 04 37 00	- do. - HD74LS08P	"	AND		
※	i G 04 38 00	- do. - HD7417P	"	Buffer		
※	i G 04 40 00	- do. - HD74LS74AP	"	D Flip-Flop		
※	i G 04 42 00	- do. - HD74LS138P	"	Decoder/Demultiplexer		
※	i G 04 43 00	- do. - HD74145P	"	BCD to Decimal Decoder		
※	i G 04 44 00	- do. - HD74LS161P	"	Synchronous 4 bit Counter		
※	i G 04 45 00	- do. - HD74LS240P	"	Bufferx8		
※	i G 04 46 00	- do. - SN74LS245	"	Octal Bus Transceivers		
※	i G 04 47 00	- do. - SN74LS273	"	Octal D Flip-Flop		
※	i G 04 48 00	- do. - SN75366N	"	NAND(TTL to MOS)		
※	i G 04 49 00	- do. - μPD8035	"	CPU		
※	i G 04 50 00	- do. - μPD8243	"	I/O EXP		

※ New Parts (新規部品) (J: Japan, U: US.American, C: Canadian, G: General)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※	i G:04:52:00	IC TC5516P	I C	2Kx8 bit RAM		
※	i G:04:53:00	- do. - TC4009UBP	〃	Inverter		
※	i G:04:61:00	- do. - MN3009	〃	256 Stage BBD		
※	i G:04:80:00	- do. - HD74LS366	〃	Bus Driver		
※	i G:04:83:00	- do. - HD7416P	〃	Inverter		
	i G:05:28:00	- do. - TC40H032P	〃	2-input OR x 4		
※	i T:31:10:00	- do. - YM311	〃	KC		
※	i T:31:20:00	- do. - YM312	〃	CP		
※	i T:31:60:00	- do. - YM316	〃	ACC		
※	i T:31:80:00	- do. - YM318	〃	MPX		
※	i T:32:00:00	- do. - YM320	〃	IG		
※	i T:32:10:00	- do. - YM321	〃	EG		
※	i T:32:20:00	- do. - YM322	〃	EC		
※	i T:32:70:00	- do. - YM327	〃	ADD		
※	i T:33:40:00	- do. - YM334	〃	AG		
※	i T:34:40:00	- do. - YM344	〃	PG		
※	i T:34:50:10	- do. - YM34501	〃	OPC		
※	i T:34:50:20	- do. - YM34502	〃	OPM		
※	i T:34:70:00	- do. - YM347	〃	VRG		
※	i T:43:90:00	- do. - PSA439	〃	Pressure Sensor		
※	i T:63:30:00	- do. - YM633	〃	SECII		
※	i N:00:33:00	- do. - MB8516	〃	EP ROM iG04510		
	i A:05:09:10	Transistor 2SA509(Y)	ト ラ ン ジ ス タ			
	i A:07:43:00	- do. - 2SA743A(B)	〃			
	i A:10:15:70	- do. - 2SA1015(O,Y)	〃			
	i B:05:95:20	- do. - 2SB595(O,Y)	〃			
	i B:06:86:10	- do. - 2SB686(R,O)	〃			
	i C:04:58:80	- do. - 2SC458(B,C)	〃			
	i C:04:58:90	- do. - 2SC458LG(C,D)	〃			
	i C:04:59:00	- do. - 2SC458(C,D)	〃			
	i C:05:09:20	- do. - 2SC509(Y)	〃			
	i C:07:52:30	- do. - 2SC752(O,Y)	〃			
	i C:12:12:00	- do. - 2SC1212A(C)	〃			
	i C:19:59:30	- do. - 2SC1959(O,Y)	〃			
	i E:10:12:00	FET 2SK105F	F E T			
	i F:00:00:10	Diode 1N34A	ダ イ オ ー ド			
	i F:00:00:40	- do. - 1S1555	〃			
	i F:00:00:70	- do. - 1S2473VE	〃			
	i F:00:08:80	- do. - Zener WZ-050	ツェナーダイオード			
	i F:00:16:60	- do. - RD3.6EB1	〃			
	i H:00:01:10	- do. - 5B-2	ダ イ オ ー ド			
	i H:00:02:80	- do. - 1D2C1	〃			
	i H:00:02:90	- do. - 1D2Z1	〃			
	i H:00:05:90	- do. - 10E-1	〃			
	i K:00:02:90	Photo - Coupler P873-13	フ ォ ト カ プ ラ ー			
	FC:08:54:70	Metalized Myler Cap. 0.47 μ F/100V	M M コ ン デ ン サ			
	FD:15:21:80	Polystyrene Cap. 180PF	ス テ コ ン			

※ New Parts (新規部品)

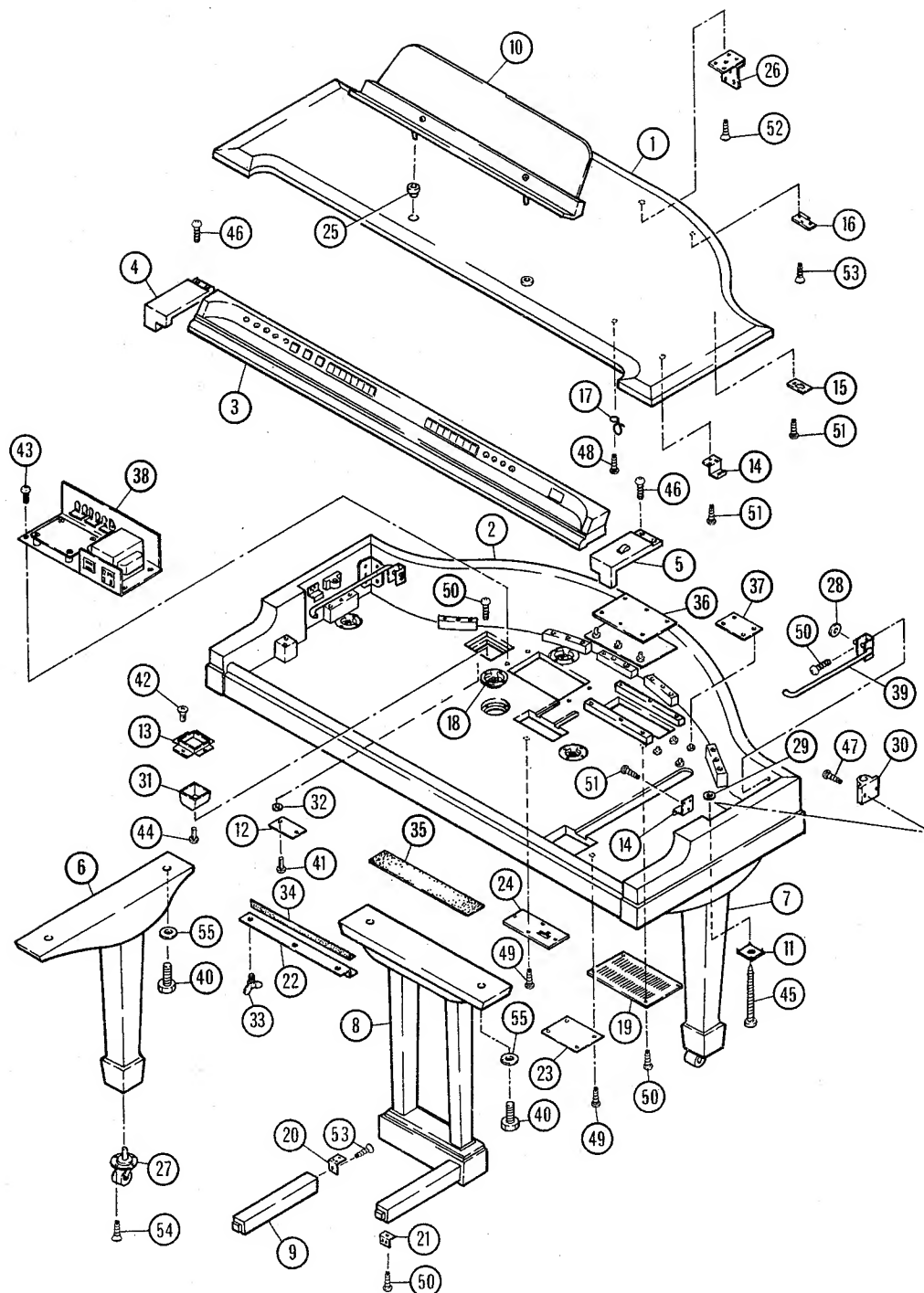
Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
	FD:15:22:70	Polystyrene Cap. 270PF	ス チ コ ン			
	FD:15:23:30	— do. — 330PF	〃			
	FM:09:62:20	Bipolar Electrolytic Cap 2.2μF/16V	バイポーラケミコン			
	FM:09:63:30	— do. — 3.3μF/16V	〃			
	FM:09:64:70	— do. — 4.7μF/16V	〃			
	FM:09:71:00	— do. — 10μF/16V	〃			
	FM:09:72:20	— do. — 22μF/16V	〃			
	FM:22:61:00	— do. — 1μF/25V	〃			
	FZ:00:22:50	Spark Suppressor Cap. 0.022μF	スパークキラーコンデンサ			
※	FZ:00:23:90	Electrolytic Cap. 3300μF/25V	ケ ミ コ ン			
※	FZ:00:24:00	— do. — 3300μF/35V	〃			
	HL:31:53:30	Metal Oxide Film Resistor 330Ω 1W	酸 金 抵 抗			
	HL:31:54:70	— do. — 470Ω 1W	〃			
	HL:31:62:20	— do. — 2.2KΩ 1W	〃			
	HV:55:42:20	Flame Proof Carbon Resistor 22Ω	不燃化カーボン抵抗			
	HV:55:44:70	— do. — 47Ω	〃			
	HV:55:51:00	— do. — 100Ω	〃			
※	HZ:00:16:70	Module Resistor 4.7KΩx8	モ ジ ュ ー ル 抵 抗			
※	HZ:00:16:80	— do. — 4.7KΩx12	〃			
※	HZ:00:16:90	— do. — 10KΩx12	〃			
※	HZ:00:17:00	— do. — 27KΩx12	〃			
※	HZ:00:17:10	— do. — 100KΩx10	〃			
※	HZ:00:17:20	— do. — 470KΩx12	〃			
※	HZ:00:17:30	Metal Film Resistor 1KΩ ±0.1%	金 皮 抵 抗			
※	HZ:00:17:40	— do. — 2KΩ ±0.1%	〃			
	HS:11:04:00	Variable Resistor B5KΩ 16φ	可 変 抵 抗 器	Pitch		
※	HS:31:11:10	— do. — G50KΩx2 16φ	〃	Center Tap Treb. Mid. Bass		
※	HS:31:11:20	— do. — A50KΩx2 16φ	〃	Vol.		
※	HS:31:11:30	— do. — A10KΩ 16φ	〃	Tre. Depth, Vib. Depth		
※	HS:31:11:40	— do. — C100KΩ 16φ	〃	Tre. Speed, Vib. Speed		
	HT:19:00:50	Variable Resistor B10KΩ	半 固 定 抵 抗			
	HT:19:00:60	— do. — B20KΩ	〃			
	HT:19:00:70	— do. — B50KΩ	〃			
	HT:19:01:30	— do. — B2KΩ	〃			
	KA:10:09:40	See - Saw Switch	シーソースイッチ	Power		
	KA:40:05:00	Slide Switch	スライドスイッチ	Line Out		
	KA:40:07:00	— do. —	〃	PGM Lock		
※	KA:40:08:30	Voltage Selector	電 圧 切 替 器			
※	KA:50:15:90	Rotary Switch	ロータリースイッチ	Detune		
	KA:90:17:20	Push Switch	プッシュスイッチ			
	KA:90:18:80	— do. —	〃	Store		
	KB:00:06:90	Fuse (Miniature) T2.5A 250V	ミニチュアヒューズ			G
	KB:00:07:40	— do. — — do. — T1.6A 250V	〃			G
	KB:00:07:50	— do. — — do. — T2.0A 250V	〃			G
※	KB:00:23:50	— do. — — do. — 1.6A 250V	〃			J

※ New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※	KB:00:23:60	Fuse (Miniature) 2.0A 250V	ミニチュアヒューズ			J
※	KB:00:23:70	— do. — — do. — 2.5A 250V	〃			J
※	KB:00:25:00	— do. — — do. — 1.6A 125V	〃			U,C
※	KB:00:25:10	— do. — — do. — 2.0A 125V	〃			U,C
※	KB:00:25:20	— do. — — do. — 2.5A 125V	〃			U,C
	NB:04:89:90	LED Unit	L E D ユ ニ ッ ト			
※	NB:81:60:60	Card Reader Unit	カードリーダーユニット			
※	NB:81:61:50	Key Switch Unit I	スイッチユニット I	6		
※	NB:81:61:60	— do. — II	〃 II	4		
	NB:03:70:40	Tablet Switch	タブレットスイッチ	Pedal		
※	NB:81:61:70	Power Supply Unit	電 源 ユ ニ ッ ト			J
※	NB:81:72:20	— do. —	〃			U,C
※	NB:81:72:30	— do. —	〃			G
※	NB:81:74:00	Power Transformer Unit	電源トランスユニット			
※	MG:00:10:30	AC Cord	電 源 コ ー ド			J
※	MG:00:10:40	— do. —	〃			U
※	MG:00:10:50	— do. —	〃			G
※	MG:00:11:20	— do. —	〃			C
※	MZ:80:85:50	Flat Cable Assy FM 30P	F M 線 材 キ ッ ト			
※	MZ:80:85:60	— do. — MPX 30P	M P X 〃			
※	MZ:80:85:80	— do. — TD 20P	T D 〃			
※	MZ:80:85:90	— do. — RW 26P	R W 〃			
	GD:90:02:50	Line Transformer	ラ イ ン ト ラ ン ス			
	GE:30:03:50	Choke Coil 68μH	チ ョ ー ク コ イ ル			
	GE:90:01:70	OSC Coil 125μH	O S C コ イ ル			
※	QU:00:10:00	Ceramic Vibrator 6.00MHz	セラミック発振子			
	LB:10:04:70	Phone Jack S-G7641	ジ ャ ッ ク			
	LB:30:14:40	— do. —	〃			
	LB:30:01:60	Cannon Socket XLR3-32	キャノンソケット			
※	LB:20:18:20	AC Inlet 2P	2 P イ ン レ ッ ト			
	LB:30:07:30	Base Pin 3P	2.5ピッチベースピン	Top Entry		
	LB:50:02:50	— do. — 5P	〃	— do. —		
	LB:60:24:60	— do. — 7P	〃	— do. —		
	LB:60:24:90	— do. — 8P	〃	— do. —		
	LB:60:24:70	— do. — 10P	〃	— do. —		
	LB:60:31:30	— do. — 12P	〃	— do. —		
	LB:50:02:70	— do. — 5P	〃	Side Entry		
※	LB:60:37:00	— do. — 6P	〃	— do. —		
	LB:60:25:00	— do. — 7P	〃	— do. —		
	LB:50:03:70	— do. — 5P	〃	Bottom Entry		
	LB:60:30:60	— do. — 8P	〃	— do. —		
	LB:60:30:70	— do. — 10P	〃	— do. —		
	LB:30:07:20	Housing 3P	2.5ピッチハウジング			
	LB:50:02:40	— do. — 5P	〃			
	LB:60:36:80	— do. — 6P	〃			
	LB:60:24:40	— do. — 7P	〃			
	LB:60:24:80	— do. — 8P	〃			

※ New Parts (新規部品)

B. Cabinet (外装)



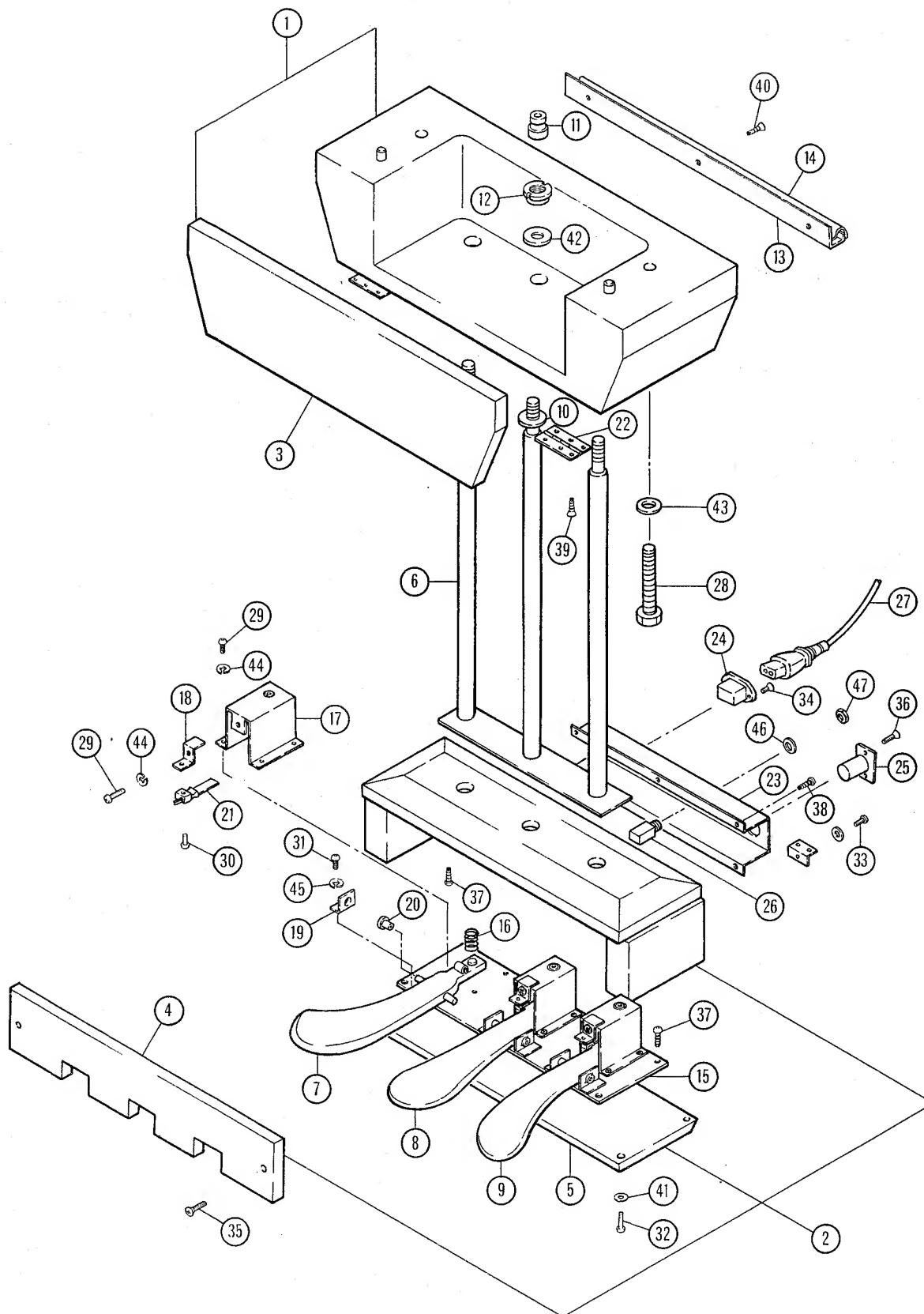
Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※ 1	DA:80:54:20	Top Board Ass'y	屋 根 集 成			
※ 2	DA:80:54:30	Side Board Ass'y	枠 集 成			
※ 3	DA:80:54:90	Control Panel Ass'y	コントロールパネル集成			
※ 4	DA:80:55:20	End Block Ass'y (L)	拍子木集成(左)			
※ 5	DA:80:55:30	— do. — (R)	” (右)			

※ New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※ 6	DA:80:55:40	Fore Leg Ass'y (L)	前脚集成(左)			
※ 7	DA:80:55:50	- do. - (R)	〃 (右)			
※ 8	DA:80:55:60	Hind Leg Ass'y	後脚集成			
※ 9	DB:81:62:30	Hind Leg Support	後脚横柱			
※ 10	DA:80:56:10	Music Rest Ass'y	譜面板集成			
※ 11	AA:02:11:80	Square Washer	シャーシ締付金具			
※ 12	AA:81:12:60	Cover	蓋		GS2	J
	AA:81:26:00	- do. -	〃		GS2	U, C, G
※ 13	AA:81:14:00	Battery Cover	バッテリーカバー		GS2	
※ 14	AA:81:45:90	Holder, Top Board	受け金具			
※ 15	AA:81:46:00	Holder, Stay	ステー受け金具			
※ 16	AA:81:46:10	D Rack Hinge (I)	Dラック蝶番(I)	Female		
※ 17	AA:81:46:30	D Rack Hook	Dラックフック		GS2	
※ 18	AA:81:46:40	Nut, Leg	脚用ナット			
※ 19	AA:81:46:50	Radiator Grille	放熱グリル			
※ 20	AA:81:46:70	Hinge, Hind Leg	後脚横柱蝶番			
※ 21	AA:81:46:80	Angle, Hind Leg	〃 アングル			
※ 22	AA:81:48:30	Music Rest Holder (I)	譜面板ホルダー (I)			
※ 23	AA:81:50:90	CNX Plate	C N X プレート			
※ 24	AA:81:51:00	CNP Plate	C N P プレート			
※ 25	AA:81:68:80	Music Rest Bushing	譜面板ブッシュ			
※ 26	BB:80:16:10	Hinge, Top Board	屋根蝶番			
※ 27	BB:80:16:20	Caster	キャスター			
※ 28	CB:00:58:30	Bushing	ブッシュ			
※ 29	CB:01:06:40	P Nut	P ナット			
※ 30	CB:01:85:90	Keyboard Stopper	鍵盤受け	Top Board Screw Guide		
※ 31	CB:81:42:40	Battery Case	バッテリーケース		GS2	
※ 32	CB:81:29:20	Stopper	グリップ型止め輪			
※ 33	CB:81:83:30	Plastic Screw 4 x 16 BL	プラスチック製化粧ネジ			
※ 34	CC:02:18:50	Felt BL	フェルト			
※ 35	CC:02:18:60	- do. - BL	〃			
※ 36	NA:80:69:60	Circuit Board A # 8609	A シート		GS2	
※ 37	NA:80:70:60	- do. - PN-CNB # 8614	PN-CNB シート			
※ 38	NB:81:61:70	Power Supply Unit	電源ユニット			J
※	NB:81:72:20	- do. -	〃			U, C
※	NB:81:72:30	- do. -	〃			G
※ 39	NB:81:72:80	Stay Ass'y	ステ - Ass'y			
※ 40	EX:00:00:70	Bolt M10 x P1.25 x 75 BL	ボルト			
※ 41	EA:33:02:00	Pan Head Screw M3 x 20 BL	ナベ小ネジ			
※ 42	EA:34:01:20	- do. - M4 x 12 BL	〃			
※ 43	ED:04:01:40	Bind Screw M4 x 14 Ye	バインド小ネジ			
※ 44	ED:33:00:60	- do. - M3 x 6 BL	〃			
※ 45	EG:35:15:50	Pan Head Screw M5 x 155 BL	尖先ナベ小ネジ			
※ 46	EH:04:02:50	Truss Head Tapping Screw 4 x 25 Ye	トラスタッピングネジ			
※ 47	Ei:03:51:40	Bind Tapping Screw 3.5 x 14 Ye	バインドタッピングネジ			
※ 48	Ei:33:01:20	- do. - 3 x 12 BL	〃			
※ 49	Ei:33:51:20	- do. - 3.5 x 12 BL	〃			
※ 50	Ei:33:51:40	- do. - 3.5 x 14 BL	〃			
※ 51	Ei:34:01:60	Bind Tapping Screw 4 x 16 BL	バインドタッピングネジ			
※ 52	EO:04:01:60	Flat Head Tapping Screw 4 x 16 Ye	皿タッピングネジ			
※ 53	EO:33:51:60	- do. - 3.5 x 16 BL	〃			
※ 54	EP:04:13:20	Flat Head Wood Screw 4.1 x 32 Ye	皿木ネジ			
※ 55	EV:20:31:00	Flat Washer φ 10 BL	平座金			

※ New Parts (新規部品)

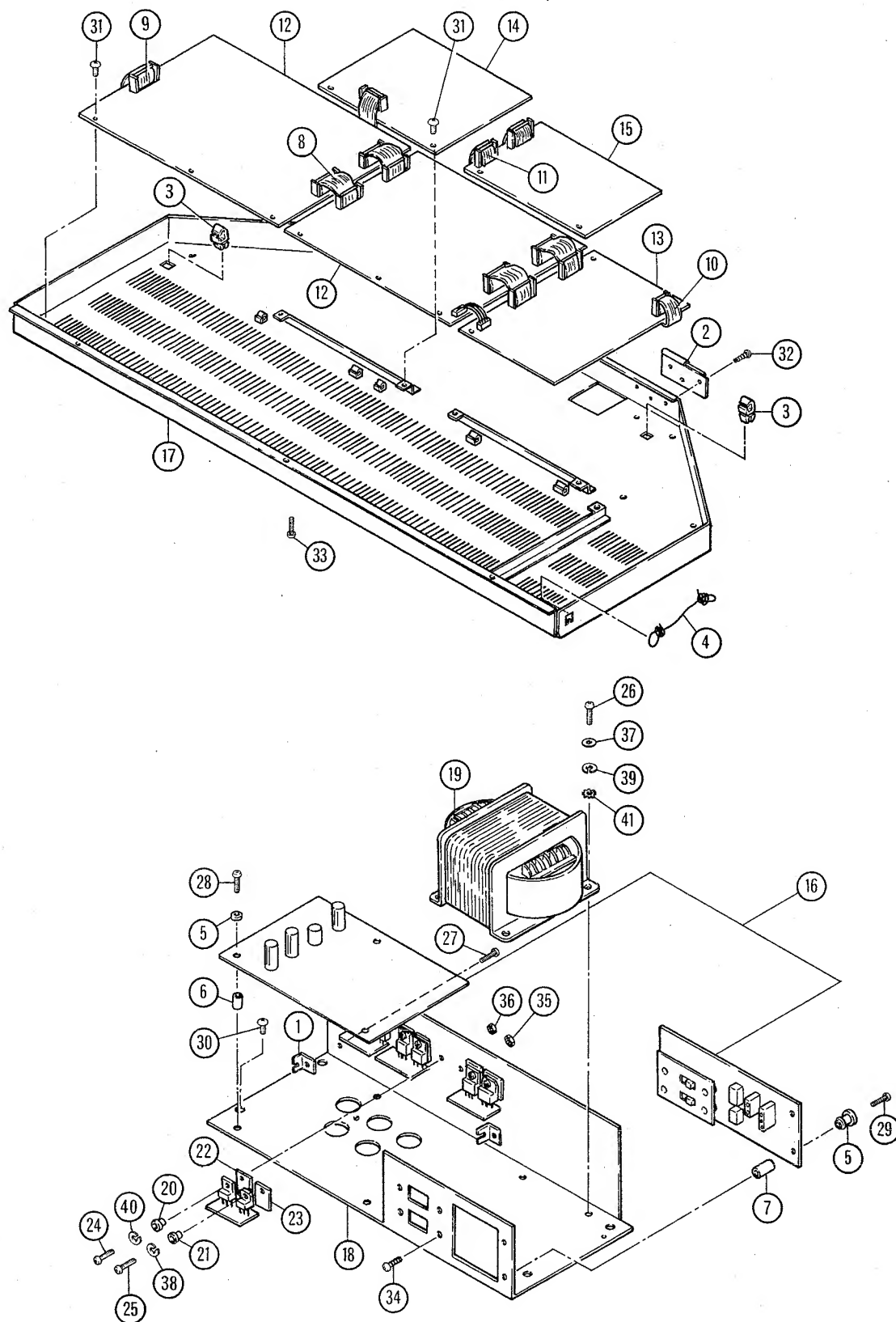
C. Pedal Assembly (ペダルAss'y)



Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※	DA:80:55:80	Pedal Case Ass'y	ペダル柱集成			
※ 1	DA:80:55:90	Bottom Beam Ass'y	ペダル持竿集成			
※ 2	DA:80:56:00	Pedal Box Ass'y	ペダル箱集成			
※ 3	DB:81:62:50	Bottom Beam Cover	ペダル持竿蓋			
※ 4	DB:81:63:20	Front Board, Pedal Box	ペダル箱前板			
※ 5	DB:81:63:30	Bottom Board, Pedal Box	ペダル箱底板			
※ 6	AA:81:46:90	Pedal Pipe	ペダル箱吊りパイプ			
※ 7	NB:81:62:30	Pedal (L)	ペダル (左)			
※ 8	NB:81:62:40	- do. - (C)	" (中)			
※ 9	NB:81:62:50	- do. - (R)	" (右)			
※ 10	AA:81:47:00	Pedal Pipe Washer	飾りワッシャー			
※ 11	CB:81:70:50	Pedal Pipe Bushing	ペダルパイプブッシュ			
※ 12	EX:00:00:90	Pedal Pipe Nut 15 x P1	軸受用ナット			
※ 13	AA:81:47:10	Music Rest Holder (II)	譜面板ホルダー (II)			
※ 14	CC:02:18:50	Felt BL	フェルト			
※ 15	AA:81:51:20	Pedal Ass'y Fixing Plate	ペダル Ass'y 取付板			
※ 16	AA:81:51:30	Pedal Spring	ペダルバネ			
※ 17	AA:81:51:40	Pedal Stopper	ペダルストッパー			
※ 18	AA:81:51:50	Pedal SW Fixing Plate	ペダル SW 取付板			
※ 19	AA:81:51:60	Pedal Shaft Holder	ペダル軸受			
20	CB:00:58:30	Pedal Shaft Bushing	ブッシュ			
21	NB:03:70:40	Tablet Switch	タブレットスイッチ			
22	AA:03:44:70	Hinge	蝶番			
※ 23	AA:81:51:10	I/O Chassis	I/O シャーシ			
※ 24	LB:20:18:20	AC Inlet 2P C-209	2P インレット		GS2	
25	LB:30:01:60	Cannon Socket XLR 3-32	キャノンソケット			
26	LB:10:04:70	Jack JL2A	ジャック			
※ 27	MG:00:10:30	AC Cord	電源コード			J
※	MG:00:10:40	- do. -	"			U
※	MG:00:10:50	- do. -	"			G
※	MG:00:11:20	- do. -	"			C
28	EX:00:00:80	Bolt M10 x P1.25 x 100 BL	ボルト			
29	EA:03:00:60	Pan Head Screw M3 x 6 Ye	ナベ小ネジ			
30	EA:03:01:00	- do. - M3 x 10 - do. -	"			
31	EA:04:00:60	- do. - M4 x 6 - do. -	"			
32	EA:04:01:80	- do. - M4 x 18 - do. -	"			
33	EA:34:01:00	- do. - M4 x 10 BL	"			
34	EB:33:00:60	Flat Head Screw M3 x 6 - do. -	皿小ネジ			
35	EB:33:01:80	- do. - M3 x 18 - do. -	"			
36	EF:33:00:60	Oval Head Screw M3 x 6 - do. -	丸皿小ネジ			
37	Ei:03:51:40	Bind Tapping Screw 3.5 x 14 Ye	バインドタッピングネジ			
38	EJ:33:01:00	Pan Head Tapping Screw 3 x 10 BL	ナベタッピングネジ			
39	EO:33:01:20	Flat Head Tapping Screw 3 x 12 - do. -	皿タッピングネジ			
40	EO:33:51:60	- do. - 3.5 x 16 - do. -	"			
41	EV:20:00:40	Flat Washer φ4 Ye	平座金			
42	EV:20:01:60	- do. - φ16	"			
43	EV:20:31:00	- do. - φ10 BL	"			
44	EV:30:00:30	Spring Lock Washer φ3 Ye	バネ座金			
45	EV:30:00:40	- do. - φ4 - do. -	"			
46	LX:20:00:10	Flat Washer φ9	特殊平座金			
47	LX:20:00:20	Hexagonal Nut M9	特殊六角ナット			

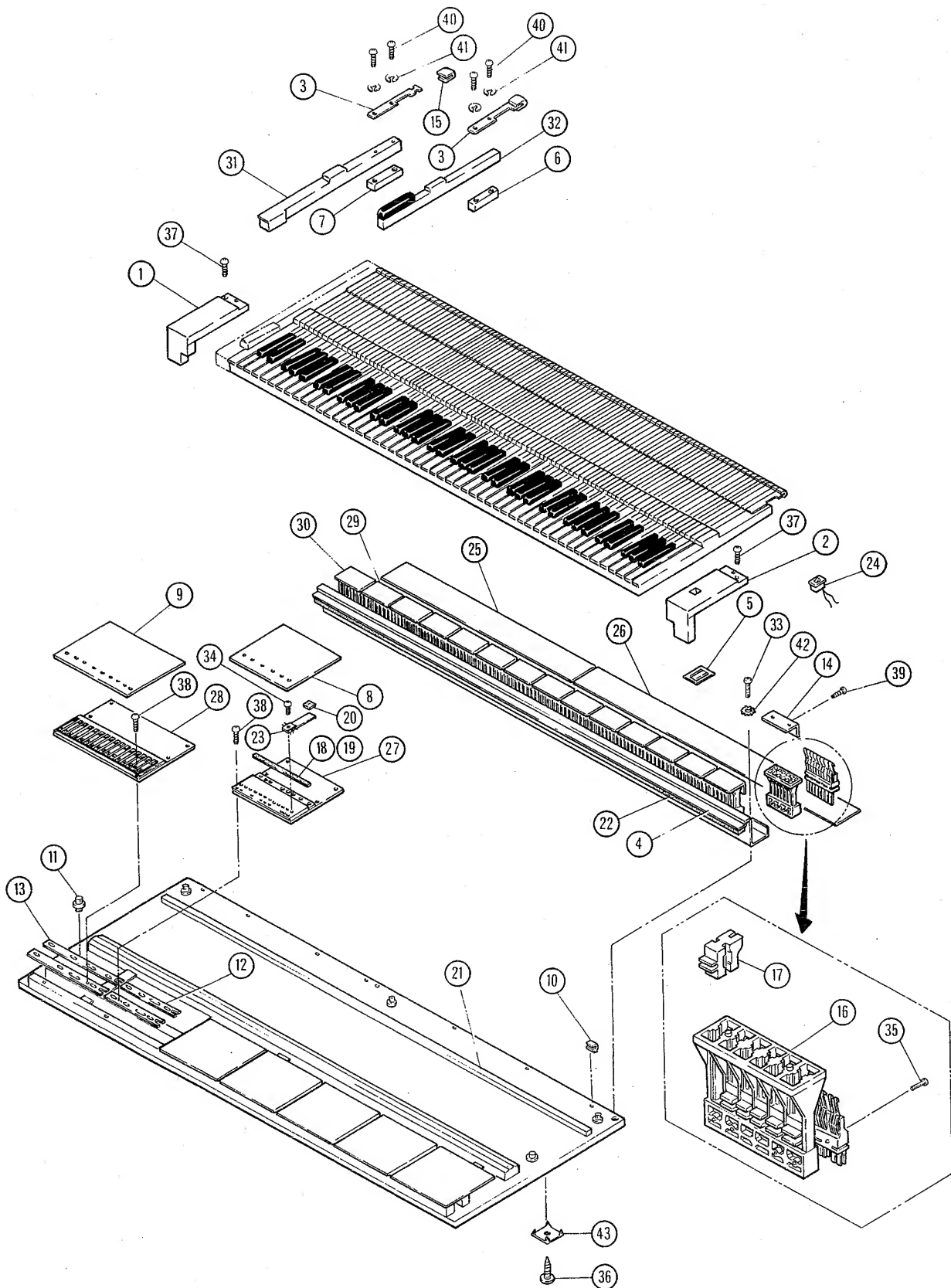
※ New Parts (新規部品)

D. D Rack & Power Supply Unit (Dラック及び電源ユニット)



※ New Parts (新規部品)

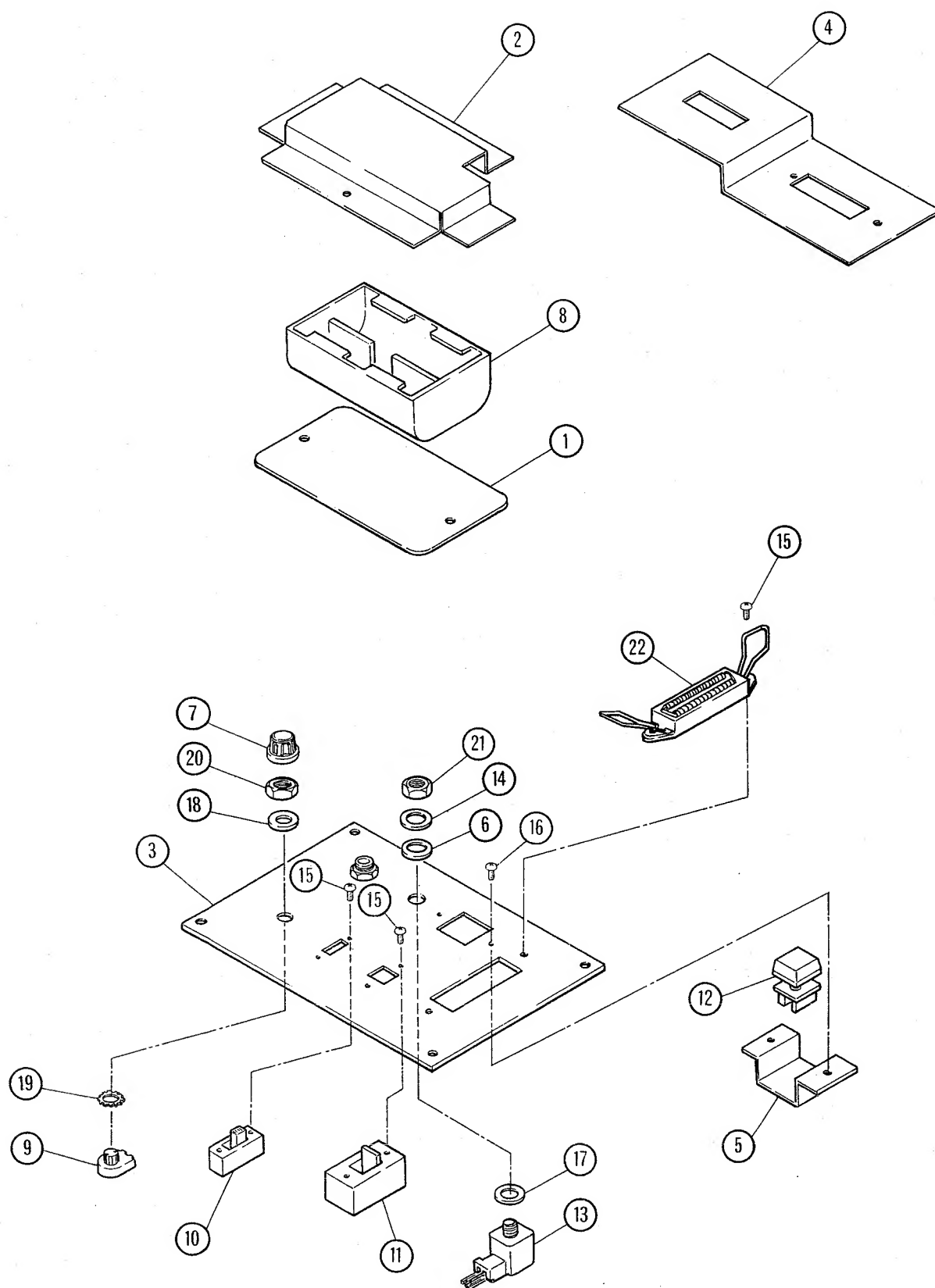
E. Keyboard Assembly (鍵盤)



Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※ 1	DA:80:55:20	End Block Ass'y (L)	拍子木集成(左)			
※ 2	DA:80:55:30	- do. - (R)	〃 (右)			
※ 3	AA:81:49:80	Actuator Plate	アクチュエータ駆動板		GS2	
※ 4	AA:81:50:70	Switch Rail	スイッチレール			
※ 5	BB:80:16:80	Stopper Ring, SW	スイッチ止め輪			
※ 6	BF:00:00:10	Key Weight	キーウェイト	Black Key	GS2	
※ 7	BF:00:00:20	- do. -	〃	White Key	GS2	
※ 8	CA:80:23:70	Dust Proof Cover PC-1	PC-1 防塵シート			
※ 9	CA:80:23:80	- do. - PC-2	PC-2 防塵シート			
※ 10	CB:03:54:00	P.C.B. Support	PCB サポート			
※ 11	CB:08:70:00	P.C.B. Holder	シートホルダー			
※ 12	CB:81:72:80	PC-1 Film	PC-1 フィルム			
※ 13	CB:81:72:90	PC-2 Film	PC-2 フィルム			
※ 14	CB:81:73:00	Contact Cover	接点カバー			
※ 15	CB:81:73:60	Actuator Plate Cap	駆動板キャップ		GS2	
※ 16	CB:81:73:70	Actuator Guide	アクチュエータガイド		GS2	
※ 17	CB:81:73:80	Actuator	アクチュエータ		GS2	
※ 18	CC:01:46:30	PC-1 Stopper Felt	PC-1ストッパーフェルト			
※ 19	CC:01:46:40	PC-2 - do. -	PC-2 〃			
※ 20	CC:03:04:80	Sensor Lever Felt	センサーレバーフェルト			
※ 21	CC:07:04:10	Key Back Rail Felt	ストッパーフェルト I			
※ 22	CD:07:02:30	Keyboard Stopper Felt	ストッパーフェルト II			
※ 23	IT:43:90:00	IC PSA439	I C			
※ 24	KA:10:09:40	See-Saw Switch	電源スイッチ	Power		
※ 25	NA:80:69:70	Circuit Board MK1 #8610	MK1 シート			
※ 26	NA:80:69:80	- do. - MK2 #8611	MK2 シート			
※ 27	NB:81:61:20	PC-1 Unit	PC-1 ユニット	12 Key		
※ 28	NB:81:61:30	PC-2 Unit	PC-2 ユニット	16 Key		
※ 29	NB:81:61:50	Key Switch Unit I	スイッチユニット I	6	GS2	
※ 30	NB:81:61:60	- do. - II	〃 II	4	GS2	
※ 31	NX:80:01:40	White Key Ass'y C	白 鍵 Ass'y			
※	NX:80:01:50	- do. - D	〃			
※	NX:80:01:60	- do. - E	〃			
※	NX:80:01:70	- do. - F	〃			
※	NX:80:01:80	- do. - G	〃			
※	NX:80:01:90	- do. - A	〃			
※	NX:80:02:00	- do. - B	〃			
※	NX:80:02:10	- do. - A'	〃	1A		
※	NX:80:02:20	- do. - C'	〃	88C		
※ 32	NX:80:02:30	Black Key Ass'y	黒 鍵 Ass'y			
33	EA:04:01:20	Pan Head Screw M4 x 12 Ye	ナベ小ネジ			
34	ED:02:60:60	Bind Screw M2.6 x 6 Ye	バインド小ネジ			
35	ED:03:02:50	- do. - 3 x 25 Ye	〃			
36	EG:35:03:00	Pan Head Screw M5 x 30 BL	尖先ナベ小ネジ			
37	EH:04:02:50	Truss Head Tapping Screw 4 x 25 Ye	トラスタッピングネジ			
38	EI:03:01:40	Bind Tapping Screw 3 x 14 Ye	バインドタッピンネジ			
39	EI:03:01:60	- do. - 3 x 16 Ye	〃			
40	EI:04:03:50	- do. - 4 x 35 Ye	〃			
41	EV:30:00:40	Spring Lock Washer φ4 Ye	バネ座金			
42	EV:41:00:40	Toothed Lock Washer A4S Ye	歯付座金			
43	AA:02:11:80	Square Washer	シャーン締付金具			

※ New Parts (新規部品)

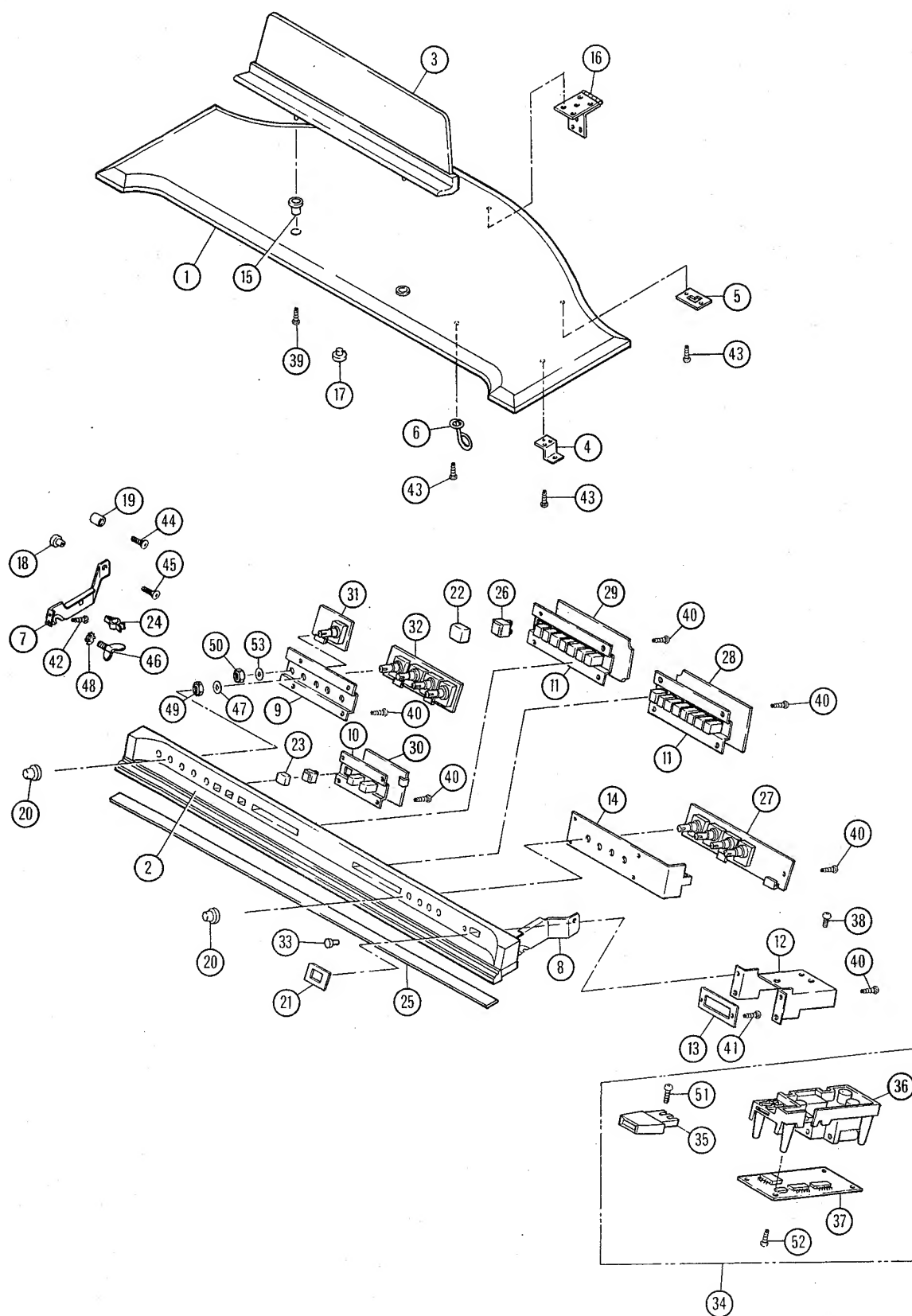
F. CNX Plate (CNX プレート)



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※ New Parts (新規部品)

G. Control Panel & Top Board Assembly (コントロールパネル及び屋根)



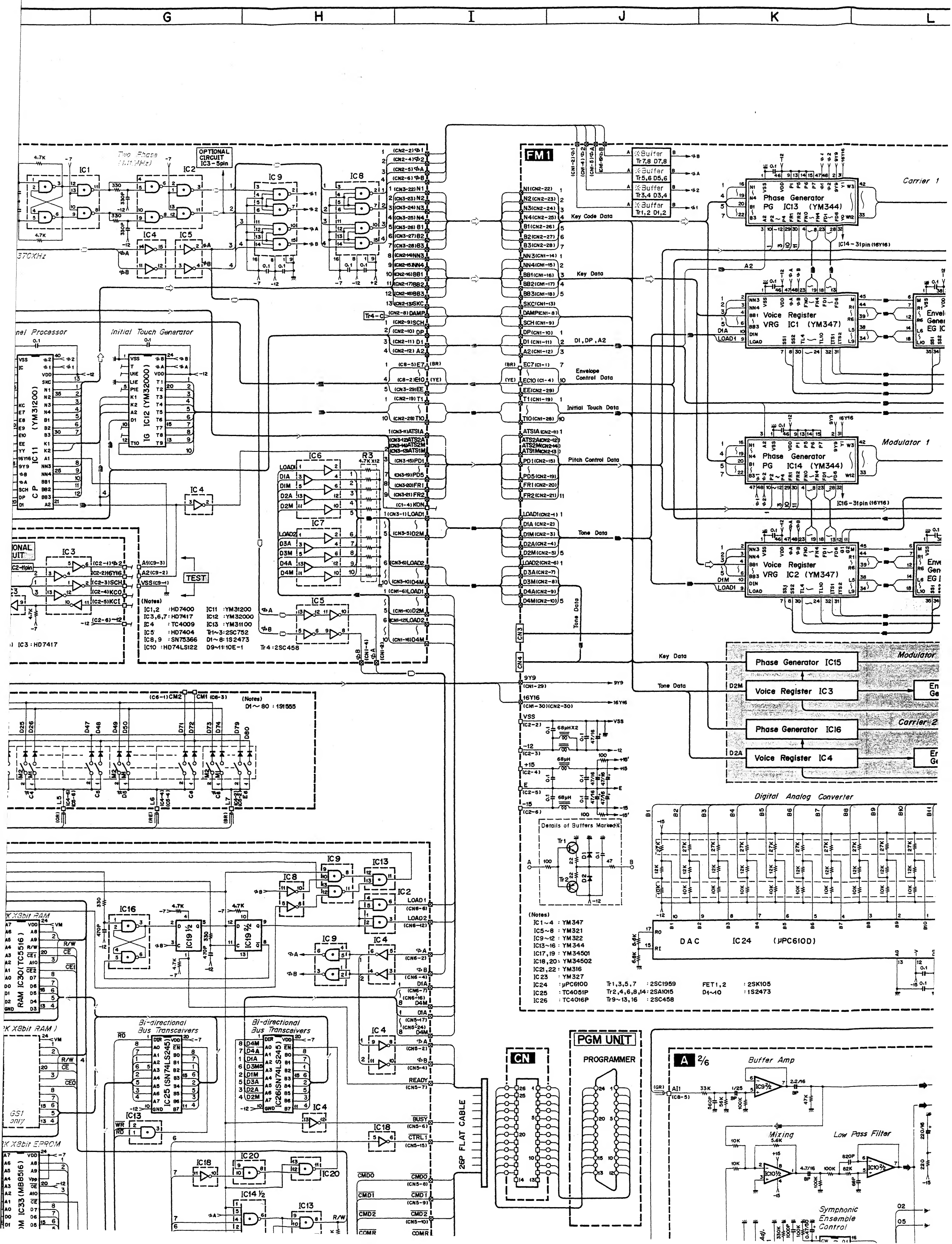
Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※ 1	DA:80:54:20	Top Board Ass'y	屋 根 集 成			
※ 2	DA:80:54:90	Control Panel Ass'y	コントロールパネル集成			
※ 3	DA:80:56:10	Music Rest Ass'y	譜 面 板 集 成			
※ 4	AA:81:45:90	Holder, Top Board	受 け 金 具			
※ 5	AA:81:46:00	Holder, Stay	ス テ ー 受 け 金 具			
※ 6	AA:81:46:30	D Rack Hook	D ラ ッ ク フ ッ ク		GS2	
※ 7	AA:81:48:90	Control Panel Rotary (L)	パネル回転金具 (左)			
※ 8	AA:81:49:00	— do. — (R)	" (右)			
※ 9	AA:81:49:10	VR Angle	ポリウムアングル			
※ 10	AA:81:49:20	SW Angle I	スイッチアングル I			
※ 11	AA:81:49:30	— do. — II	" II			
※ 12	AA:81:49:40	Holder, Card Reader	リ ー ダ ー ホ ル ダ ー			
※ 13	AA:81:51:80	Plate, C/R Escutcheon	エスカッションプレート			
※ 14	AA:81:64:60	EQ Plate	EQ プ レ ー ト			
※ 15	AA:81:68:80	Music Rest Bushing	譜 面 板 ブ ッ シ ュ			
※ 16	BB:80:16:10	Hinge, Top Board	屋 根 蝶 番			
※ 17	CB:00:20:50	Rubber Button BL	ゴ ム ボ タ ン			
※ 18	CB:00:58:30	Bushing	ブ ッ シ ュ			
※ 19	CB:00:65:40	Rotary Stopper	回 転 止 め			
※ 20	CB:80:84:00	Knob	ツ マ ミ	VR, Switch		
※ 21	CB:81:71:00	Card Reader Escutcheon	リ ー ダ ー エスカッション			
※ 22	CB:81:71:10	Switch Button -1	ス イ ッ チ ボ タ ン			
※	CB:81:71:20	— do. — -2	"			
※	CB:81:71:30	— do. — -3	"			
※	CB:81:71:40	— do. — -4	"			
※	CB:81:71:50	— do. — -5	"			
※	CB:81:71:60	— do. — -6	"			
※	CB:81:71:70	— do. — -7	"			
※	CB:81:71:80	— do. — -8	"			
※	CB:81:71:90	— do. — -9	"			
※	CB:81:72:00	— do. — -10	"			
※	CB:81:72:10	— do. — -11	"			
※	CB:81:72:20	— do. — -12	"			
※	CB:81:72:30	— do. — -13	"			
※	CB:81:72:40	— do. — -14	"			
※	CB:81:72:50	— do. — -15	"			
※	CB:81:72:60	— do. — -16	"			
※ 23	CB:81:72:70	Push Button	ブ ッ シ ュ ボ タ ン			
※ 24	CB:81:74:20	Top Board Stay Holder	ロ ッ ド ホ ル ダ ー			
※ 25	CC:01:46:20	Felt BL	フ ェ ル ト			
※ 26	KA:90:17:20	Push Switch	ブ ッ シ ュ ス イ ッ チ			
※ 27	NA:80:70:20	Circuit Board PN-EQ #8614	PN-EQ シ ー ト			
※ 28	NA:80:70:30	— do. — PN-SEL-R #8614	PN-SEL-R シ ー ト			
※ 29	NA:80:70:40	— do. — PN-SEL-L #8614	PN-SEL-L シ ー ト			
※ 30	NA:80:70:50	— do. — PN-TET #8614	PN-TET シ ー ト			
※ 31	NA:80:70:70	— do. — PN-DEF #8614	PN-DEF シ ー ト			
※ 32	NA:80:70:80	— do. — PN-EFF #8614	PN-EFF シ ー ト			
※ 33	NB:04:89:90	LED Unit	LED ユ ニ ッ ト	Pilot Lamp		
※ 34	NB:81:60:60	Card Reader Unit PCR-303S	カードリーダーユニット		GS2	
※ 35	NX:80:01:30	Guide, Card Reader K03-0007	カードリーダー挿入口		GS2	
※ 36	NX:80:01:10	Mech. Unit, — do. — K90-0799	メ カ ユ ニ ッ ト		GS2	
※ 37	NX:80:01:20	Circuit Board, C/R K90-0711	C/R シ ー ト		GS2	

※ New Parts (新規部品)

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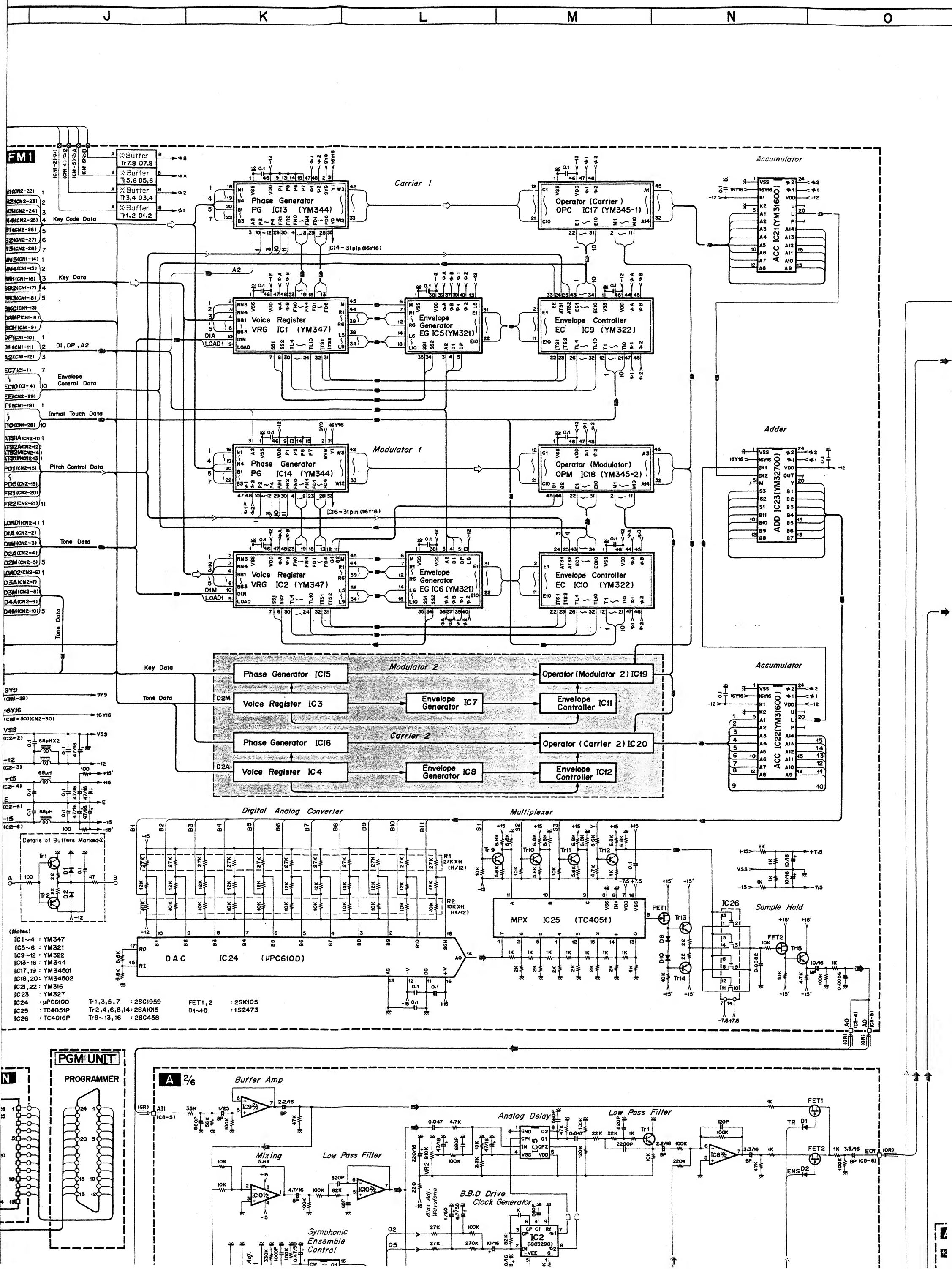
※ New Parts (新規部品)

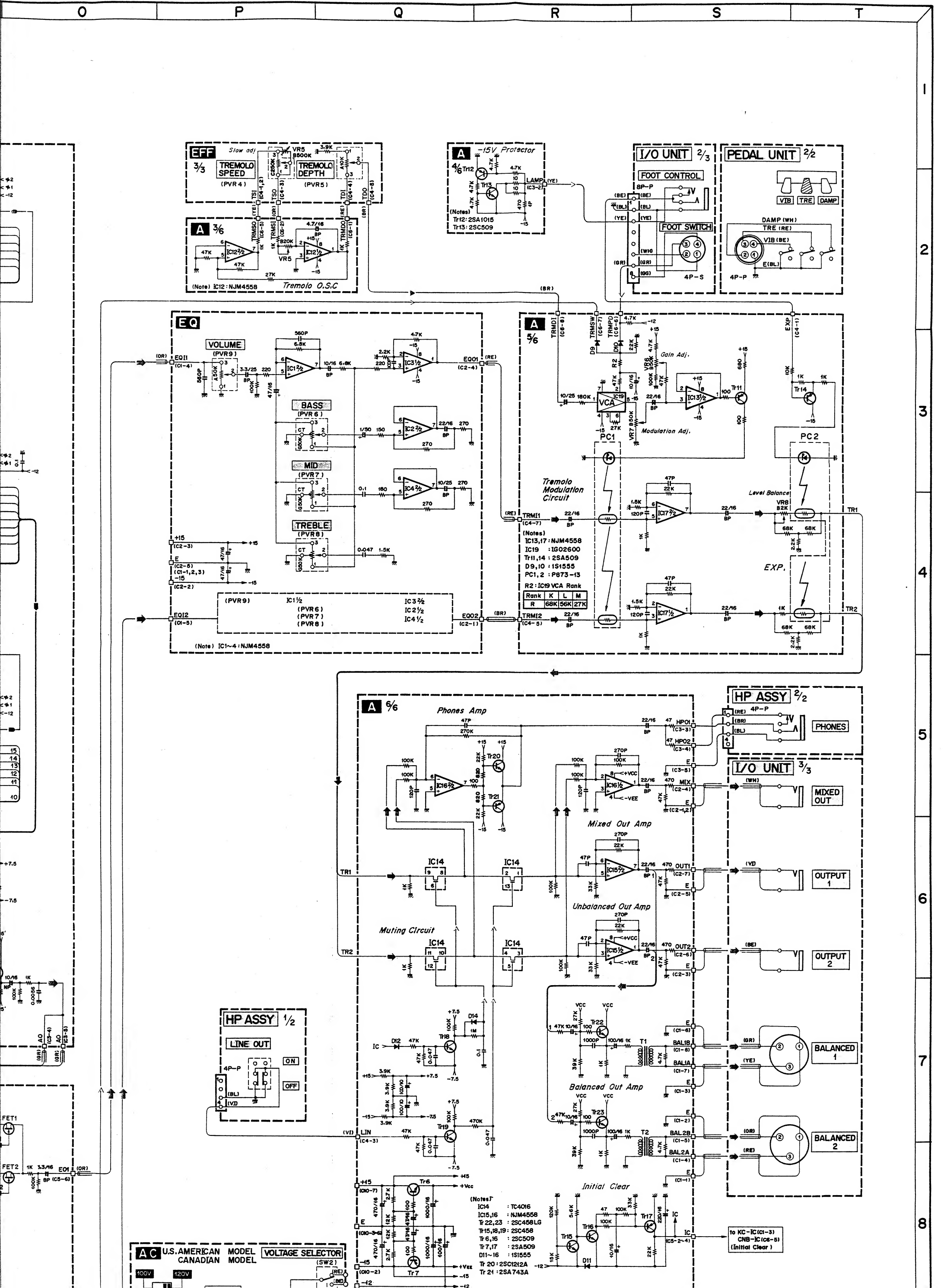
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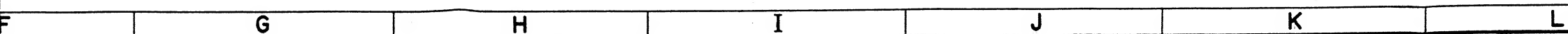
RALL CIRCUIT DIAGRAM

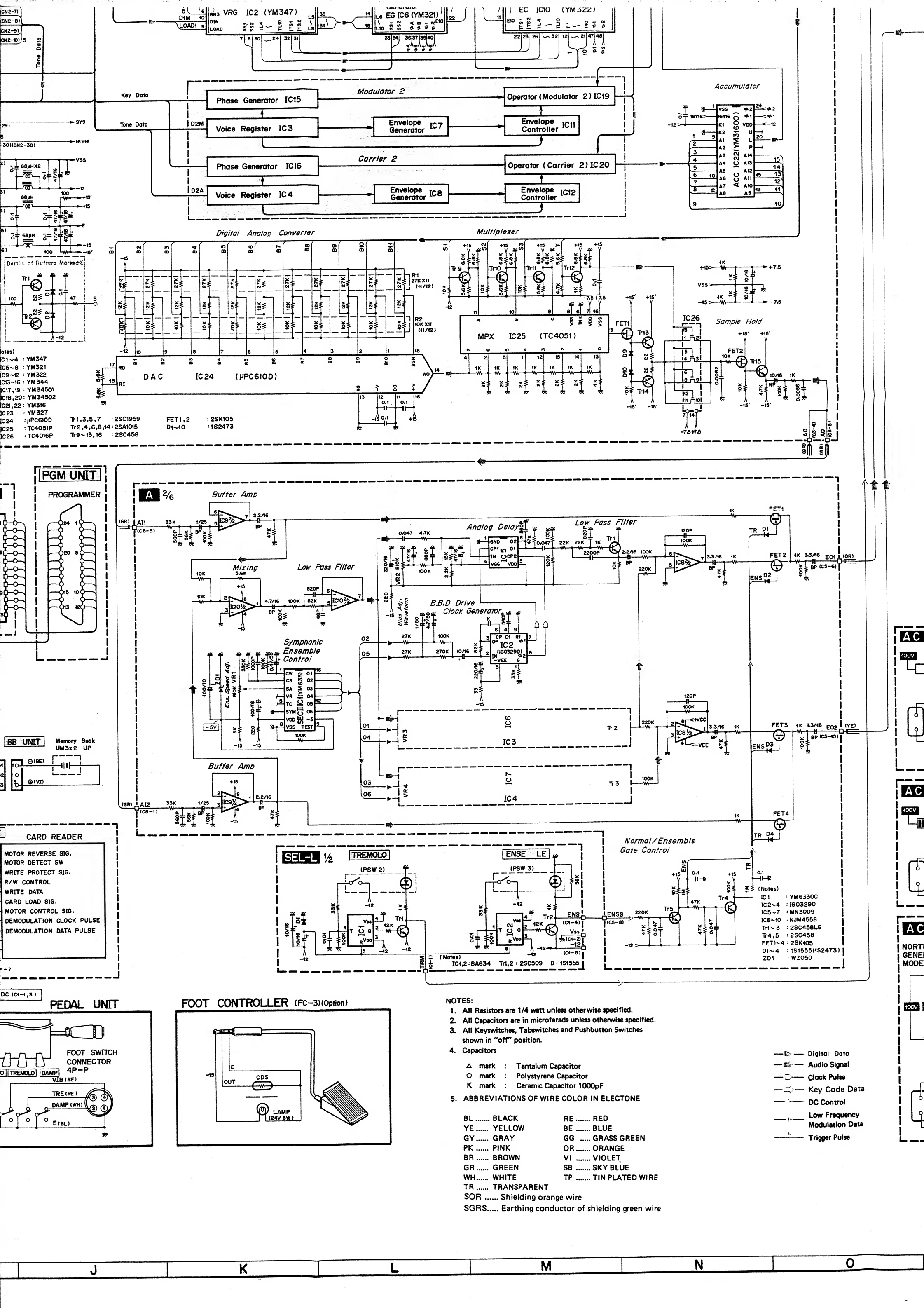
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KC

Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	EFF-Vss (C2-1)
2	VIB	RE	A-PC0 (C7-2)
3	IC	OR	A-IC (C5-2)
4	—	—	—
5	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	φ2	—	—
2	16Y16	—	—
3	SCH	—	—
4	KCO	—	—
5	KCI	—	—
6	—12	—	—

Pin No.	Pin Name	Wire Color	Destination
1	PS1	—	—
2	PS2	—	—
3	DP1	OR	EFF-DP1 (C2-2)
4	DP2	—	—
5	DP3	GR	EFF-DP3 (C2-3)
6	RP1	—	—
7	RP2	—	—
8	RP3	—	—
9	DAMP	WH	FC-P1-6 F/S4P-2
10	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	L7	S BR	MK3-L7 (C4-2)
2	L6	S RE	MK3-L6 (C4-4)
3	L5	S OR	MK3-L5 (C4-6)
4	L4	S YE	MK3-L4 (C4-8)
5	L3	S GR	MK4-L3 (C6-2)
6	L2	S BE	MK4-L2 (C6-4)
7	L1	S VI	MK4-L1 (C1-1)
8	LO	—	—

Pin No.	Pin Name	Wire Color	Destination
1	C#2	S BR	MK4-C#2 (C2-12)
2	C#1	S RE	MK4-C#1 (C2-9)
3	O2	S OR	MK4-O2 (C2-8)
4	D1	S YE	MK4-D1 (C2-6)
5	D#2	S GR	MK4-D#2 (C2-4)
6	D#1	S BE	MK4-D#1 (C2-1)
7	E2	S VI	MK4-E2 (C3-12)
8	E1	S GY	MK4-E1 (C3-9)
9	F2	S WH	MK4-F2 (C3-8)
10	F1	S GG	MK4-F1 (C3-5)
11	F#2	S SB	MK4-F#2 (C3-4)
12	F#1	S PK	MK4-F#1 (C3-1)

Pin No.	Pin Name	Wire Color	Destination
1	G2	S BR	MK4-G2 (C4-12)
2	G1	S RE	MK4-G1 (C4-9)
3	G#2	S OR	MK4-G#2 (C4-8)
4	G#1	S YE	MK4-G#1 (C4-5)
5	A2	S GR	MK4-A2 (C4-4)
6	A1	S BE	MK4-A1 (C4-1)
7	A#2	S WH	MK4-A#2 (C5-12)
8	A#1	S GY	MK4-A#1 (C5-9)
9	B2	S WH	MK4-B2 (C5-8)
10	B1	S GG	MK4-B1 (C5-5)
11	C2	S SB	MK4-C2 (C5-4)
12	C1	S PK	MK4-C1 (C5-1)

Pin No.	Pin Name	Wire Color	Destination
1	—7	GR	DC-7 (C6-1)
2	Vss	BL	DC-Vss (C6-2)
3	—12	BE	DC-12 (C6-3)
4	—	—	—
5	E	BL	DC-E (C6-5)
6	+15	OR	DC-15 (C6-6)

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	E10	YE	FM-E10 (C1-4)
3	E9	OR	FM-E9 (C1-3)
4	E8	RE	FM-E8 (C1-2)
5	E7	BR	FM-E7 (C1-1)

CN No.	CN Name	Destination
CN1	20P FLAT CABLE	(to RW-CN6)
CN2	30P FLAT CABLE	(to FM-CN1)
CN3	30P FLAT CABLE	(to FM-CN2)

FM

Pin No.	Pin Name	Wire Color	Destination
1	E7	YE	KC-E7 (C8-5)
2	E8	YE	KC-E8 (C8-4)
3	E9	YE	KC-E9 (C8-3)
4	E10	YE	KC-E10 (C8-2)
5	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	Vss	BL	DC-Vss (C5-2)
3	—12	BE	DC-12 (C5-3)
4	+15	OR	DC-15 (C5-6)
5	E	BL	DC-E (C5-5)
6	—15	BR	DC-15 (C5-4)

Pin No.	Pin Name	Wire Color	Destination
1	E	—	—
2	E	S GR S	—
3	E	S BE S	—
4	AO	S GR	A-A11 (C8-5)
5	AO	S BE	A-A12 (C8-1)

CN No.	CN Name	Destination
CN1	30P FLAT CABLE	(to KC-CN2)
CN2	20P FLAT CABLE	(to KC-CN3)

RW

Pin No.	Pin Name	Wire Color	Destination
1	S1	BR	SELL-S1 (C2-2)
2	L1	RE	SELL-L1 (C2-1)
3	S2	OR	SELL-S2 (C2-4)
4	L2	YE	SELL-L2 (C2-3)
5	S3	GR	SELL-S3 (C2-6)
6	L3	BE	SELL-L3 (C2-5)
7	S4	VI	SELL-S4 (C2-7)
8	L4	GY	SELL-L4 (C2-7)
9	WRT	WH	STO-WRT (C1-1)
10	—12	BE	STO-12 (C1-5)

Pin No.	Pin Name	Wire Color	Destination
1	S5	BR	SELL-S5 (C3-4)
2	L5	RE	SELL-L5 (C3-3)
3	S6	OR	SELL-S6 (C3-6)
4	L6	YE	SELL-L6 (C3-5)
5	S7	GR	SELL-S7 (C3-8)
6	L7	BE	SELL-L7 (C3-7)
7	S8	VI	SELL-S8 (C3-10)
8	L8	GY	SELL-L8 (C3-9)
9	STO	GG	SELL-STO (C3-1)
10	Vss	—	—

Pin No.	Pin Name	Wire Color	Destination
1	S1	BR	SEL-R-S1 (C1-4)
2	L9	RE	SEL-R-L9 (C1-3)
3	S2	OR	SEL-R-S2 (C1-6)
4	L10	YE	SEL-R-L10 (C1-5)
5	S3	GR	SEL-R-S3 (C1-8)
6	L11	BE	SEL-R-L11 (C1-7)
7	S4	VI	SEL-R-S4 (C1-10)
8	L12	GY	SEL-R-L12 (C1-9)
9	PLK	WH	LOCXSW-center terminal
10	S1	—	—

Pin No.	Pin Name	Wire Color	Destination
1	S5	BR	SEL-R-S5 (C2-2)
2	L13	RE	SEL-R-L13 (C2-1)
3	S6	OR	SEL-R-S6 (C2-4)
4	L14	YE	SEL-R-L14 (C2-3)
5	S7	GR	SEL-R-S7 (C2-6)
6	L15	BE	SEL-R-L15 (C2-5)
7	S8	VI	SEL-R-S8 (C2-8)
8	L16	GY	SEL-R-L16 (C2-7)
9	ST1	PK	SEL-R-ST1 (C1-1)
10	Vss	—	—

Pin No.	Pin Name	Wire Color	Destination
1	STRD	BR	STO-STRD (C1-4)
2	REV	RE	CR-REV (C1-1)
3	MSW	OR	CR-MSW (C1-6)
4	WPR	YE	CR-WPR (C1-5)
5	WEN	GR	CR-WEN (C1-3)
6	WDT	BE	CR-WDT (C1-4)
7	CLD	VI	CR-CLD (C1-7)
8	MON	GY	CR-MON (C1-8)
9	RCK	WH	CR-RCK (C1-9)
10	ROD	GG	CR-ROD (C1-10)
11	—7	GR	CR-7 (V1-11)
12	—12	BE	CR-GND (C1-12)

Pin No.	Pin Name	Wire Color	Destination
1	—7	GR	DC-7 (C4-1)
2	Vss	BL	DC-Vss (C4-2)
3	—12	BE	DC-12 (C4-3)
4	—	—	—
5	—	—	—
6	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	—12	BE	DC-12 (C7-1)
2	PON	GR	DC-PON (C7-3)
3	—7B	VI	DC-7B (C7-5)

CN No.	CN Name	Destination
CN5	26P FLAT CABLE	(to PGM UNIT 24P CONNECTOR)
CN6	20P FLAT CABLE	(to KC-CN1)

M

Pin No.	Pin Name	Wire Color	Destination
1	L1	S VI	KC-L1 (C4-7)
2	Vss	S VI S	—
3	Vss	—	—
4	LO	—	—
5	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	D#1	S BE	KC-D#1 (C5-6)
2	Vss	S BE S	—
3	Vss	S GR S	—
4	D#2	S GR	KC-D#2 (C5-5)
5	D1	S YE	KC-D1 (C5-4)
6	Vss	S YE S	—
7	Vss	S OR S	—
8	D2	S OR	KC-D2 (C5-3)
9	C#1	S RE	KC-C#1 (C5-2)
10	Vss	S RE S	—
11	Vss	S BR S	—
12	C#2	S BR	KC-C#2 (C5-1)

Pin No.	Pin Name	Wire Color	Destination
1	F#1	S PK	KC-F#1 (C5-12)
2	Vss	S PK S	—
3	Vss	S SB S	—
4	F#2	S SB	KC-F#2 (C5-11)
5	F1	S GG	KC-F1 (C5-10)
6	Vss	S GG S	—
7	Vss	S WH S	—
8	F2	S WH	KC-F2 (C5-9)
9	E1	S GY	KC-E1 (C5-8)
10	Vss	S GY S	—
11	Vss	S VI S	—
12	E2	S VI	KC-E2 (C5-7)

Pin No.	Pin Name	Wire Color	Destination
1	A1	S BE	KC-A1 (C6-6)
2	Vss	S BE S	—
3	Vss	S GR S	—
4	A2	S GR	KC-A2 (C6-5)
5	G#1	S YE	KC-G#1 (C6-4)
6	Vss	S YE S	—
7	Vss	S OR S	—
8	G#2	S OR	KC-G#2 (C6-3)
9	G1	S RE	KC-G1 (C6-2)
10	Vss	S RE S	—
11	Vss	S BR S	—
12	G2	S BR	KC-G2 (C6-1)

MK4

C1

Pin No.	Pin Name	Wire Color	Destination
1	L1	S VI	KC-L1 (C4-7)
2	Vss	S VI S	
3	Vss	—	—
4	LO	—	—
5	—	—	—

C2

Pin No.	Pin Name	Wire Color	Destination
1	D#1	S BE	KC-D#1 (C5-6)
2	Vss	S BE S	
3	Vss	S GR S	
4	D#2	S GR	KC-D#2 (C5-5)
5	D1	S YE	KC-D1 (C5-4)
6	Vss	S YE S	
7	Vss	S OR S	
8	D2	S OR	KC-D2 (C5-3)
9	C#1	S RE	KC-C#1 (C5-2)
10	Vss	S RE S	
11	Vss	S BR S	
12	C#2	S BR	KC-C#2 (C5-1)

C3

Pin No.	Pin Name	Wire Color	Destination
1	F#1	S PK	KC-F#1 (C5-12)
2	Vss	S PK S	
3	Vss	S SB S	
4	F#2	S SB	KC-F#2 (C5-11)
5	F1	S GG	KC-F1 (C5-10)
6	Vss	S GG S	
7	Vss	S WH S	
8	F2	S WH	KC-F2 (C5-9)
9	E1	S GY	KC-E1 (C5-8)
10	Vss	S GY S	
11	Vss	S VI S	
12	E2	S VI	KC-E2 (C5-7)

C4

Pin No.	Pin Name	Wire Color	Destination
1	A1	S BE	KC-A1 (C6-6)
2	Vss	S BE S	
3	Vss	S GR S	
4	A2	S GR	KC-A2 (C6-5)
5	G#1	S YE	KC-G#1 (C6-4)
6	Vss	S YE S	
7	Vss	S OR S	
8	G#2	S OR	KC-G#2 (C6-3)
9	G1	S RE	KC-G1 (C6-2)
10	Vss	S RES	
11	Vss	S BR S	
12	G2	S BR	KC-G2 (C6-1)

C5

Pin No.	Pin Name	Wire Color	Destination
1	C1	S PK	KC-C1 (C6-12)
2	Vss	S PK S	
3	Vss	S SB S	
4	C2	S SB	KC-C2 (C6-11)
5	B1	S GG	KC-B1 (C6-10)
6	Vss	S GG S	
7	Vss	S WH S	
8	B2	S WH	KC-B2 (C6-9)
9	A#1	S GY	KC-A#1 (C6-8)
10	Vss	S GY S	
11	Vss	S VI S	
12	A#2	S VI	KC-A#2 (C6-7)

C6

Pin No.	Pin Name	Wire Color	Destination
1	Vss	—	—
2	L3	S GR	KC-L3 (C4-5)
3	Vss	S GR S	
4	L2	S BE	KC-L2 (C4-6)
5	Vss	S BE S	

C7

Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK3-C1 (C3-1)
2	C2	RE	MK3-C2 (C3-2)
3	B1	OR	MK3-B1 (C3-3)
4	B2	YE	MK3-B2 (C3-4)
5	A#1	GR	MK3-A#1 (C3-5)
6	A#2	BE	MK3-A#2 (C3-6)
7	A1	VI	MK3-A1 (C3-7)
8	A2	GY	MK3-A2 (C3-8)
9	G#1	WH	MK3-G#1 (C3-9)
10	G#2	GG	MK3-G#2 (C3-10)
11	G1	SB	MK3-G1 (C3-11)
12	G2	PK	MK3-G2 (C3-12)

C8

Pin No.	Pin Name	Wire Color	Destination
1	F#1	BR	MK3-F#1 (C1-1)
2	F#2	RE	MK3-F#2 (C1-2)
3	F1	OR	MK3-F1 (C1-3)
4	F2	YE	MK3-F2 (C1-4)
5	E1	GR	MK3-E1 (C1-5)
6	E2	BE	MK3-E2 (C1-6)
7	D#1	VI	MK3-D#1 (C1-7)
8	D#2	GY	MK3-D#2 (C1-8)
9	D1	WH	MK3-D1 (C1-9)
10	D2	GG	MK3-D2 (C1-10)

C9

Pin No.	Pin Name	Wire Color	Destination
1	C#1	SB	MK3-C#1 (C2-1)
2	C#2	PK	MK3-C#2 (C2-2)
3	Vss	BL	MK3-Vss (C2-3)
4	Vss	BL	MK3-Vss (C2-4)
5	Vss	BL	DC-Vss (C2-2)

MK3

C1

Pin No.	Pin Name	Wire Color	Destination
1	F#1	BR	MK4-F#1 (C8-1)
2	F#2	RE	MK4-F#2 (C8-2)
3	F1	OR	MK4-F1 (C8-3)
4	F2	YE	MK4-F2 (C8-4)
5	E1	GR	MK4-E1 (C8-5)
6	E2	BE	MK4-E2 (C8-6)
7	D#1	VI	MK4-D#1 (C8-7)
8	D#2	GY	MK4-D#2 (C8-8)
9	D1	WH	MK4-D1 (C8-9)
10	D2	GG	MK4-D2 (C8-10)

C2

Pin No.	Pin Name	Wire Color	Destination
1	C#1	SB	MK4-C#1 (C9-1)
2	C#2	PK	MK4-C#2 (C9-2)
3	Vss	BL	MK4-Vss (C9-3)
4	Vss	BL	MK4-Vss (C9-4)
5	Vss	—	—

C3

Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK4-C1 (C7-1)
2	C2	RE	MK4-C2 (C7-2)
3	B1	OR	MK4-B1 (C7-3)
4	B2	YE	MK4-B2 (C7-4)
5	A#1	GR	MK4-A#1 (C7-5)
6	A#2	BE	MK4-A#2 (C7-6)
7	A1	VI	MK4-A1 (C7-7)
8	A2	GY	MK4-A2 (C7-8)
9	G#1	WH	MK4-G#1 (C7-9)
10	G#2	GG	MK4-G#2 (C7-10)
11	G1	SB	MK4-G1 (C7-11)
12	G2	PK	MK4-G2 (C7-12)

C4

Pin No.	Pin Name	Wire Color	Destination
1	Vss	S BR S	
2	L7	S BR	KC-L7 (C4-1)
3	Vss	S RES	
4	L6	S RE	KC-L6 (C4-2)
5	Vss	S OR S	
6	L5	S OR	KC-L5 (C4-3)
7	Vss	S YE S	
8	L4	S YE	KC-L4 (C4-4)

C5

Pin No.	Pin Name	Wire Color	Destination
1	Vss	—	TEST POINT
2	L7	—	TEST POINT
3	Vss	—	TEST POINT
4	L6	—	TEST POINT
5	Vss	—	TEST POINT
6	L5	—	TEST POINT
7	Vss	—	TEST POINT
8	L4	—	TEST POINT

C6

Pin No.	Pin Name	Wire Color	Destination
1	CM1	—	TEST POINT
2	—	—	—
3	CM2	—	TEST POINT

A

C1

Pin No.	Pin Name	Wire Color	Destination
1	E	S RE S	BAL2 OUT-PIN1
2	E	S OR S	BAL2 OUT-PIN1
3	E	S YE S	BAL1 OUT-PIN1
4	BAL2A	S RE	BAL2 OUT-PIN2
5	BAL2B	S OR	BAL2 OUT-PIN3
6	E	S GR S	BAL1 OUT-PIN1
7	BAL1A	S YE	BAL1 OUT-PIN2
8	BAL1B	S GR	BAL1 OUT-PIN3

C2

Pin No.	Pin Name	Wire Color	Destination
1	E	S WH S	MIXED OUT-PIN5-E
2	E	—	—
3	E	S BE S	OUTPUT2-PIN5-E
4	MIX	S WH	MIXED OUT-PIN7-HOT
5	E	S VI S	OUTPUT1-PIN5-E
6	OUT2	S BE	OUTPUT2-PIN7-HOT
7	OUT1	S VI	OUTPUT1-PIN7-HOT

C3

Pin No.	Pin Name	Wire Color	Destination
1	E	BL	MKL-EP
2	LAMP	YE	FC-P1-3 F/C-J-pin2
3	HPO1	BR	HP-P1-2 HP-J-R
4	HPO2	RE	HP-P1-1 HP-J-L
5	E	BL	HP-P1-3 HP-J-E

C4

Pin No.	Pin Name	Wire Color	Destination
1	EXP	BE	FC-P1-1 F/C-J-pin4
2	E	BL	FC-P1-2 F/C-J-pin3,8
3	LIN	VI	HP-P1-4 LINE SW Camer Terminal
4	E	—	—
5	TRM12	S BR	EQ-TRM12 (C2-1)
6	E	S BR S	
7	TRM11	S RE	EQ-TRM11 (C2-4)
8	E	S RES	

C5

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	IC	OR	KC-IC (C1-3)
3	IC	—	—
4	IC	—	—
5	E	—	—
6	E01	S OR	EQ-E01 (C1-4)
7	E	S OR S	
8	ENSS	GR	SELL-ENSS (C1-4)
9	E	S YE S	
10	E02	S YE	EQ-E02 (C1-5)

C6

Pin No.	Pin Name	Wire Color	Destination
1	TRMDO	RE	EFF-TRMDO (C4-4)
2	TRMSI	OR	EFF-TRMSI (C4-3)
3	—	—	—
4	E	—	—
5	TRMSO	YE	EFF-TRMSO (C4-2)
6	TRMPD	GR	FC-P1-7 F/S4P-3
7	TRMSW	BE	SELL-TRMSW (C1-1)
8	TRMDI	BR	EFF-TRMDI (C4-5)

C7

Pin No.	Pin Name	Wire Color	Destination
1	PC3	GR	EFF-PC3 (C1-2)
2	PC0	RE	KC-VIB (C1-2)
3	PC2	OR	EFF-PC2 (C1-3)
4	PC1	YE	EFF-PC1 (C1-4)
5	E	BL	EFF-E (C1-1)

C8

Pin No.	Pin Name	Wire Color	Destination
1	A12	S BE	FM-AO (C3-5)
2	E	—	—
3	E	—	—
4	E	S GR S	FM-E (C3-2)
5	A11	S GR	FM-AO (C3-4)

C9

Pin No.	Pin Name	Wire Color	Destination
1	VIBSP	VI	EFF-VIBSP (C3-3)
2	VIBPD	GG	FC-P1-8 F/S4P-4
3	—	—	—
4	VIBDI	GR	EFF-VIBDI (C3-6)
5	E	—	—
6	—	—	—
7	VIBDO	BE	EFF-VIBDO (C3-4)

C10

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	DC-12 (C3-3)
2	-15	BR	DC-15 (C3-4)
3	E	—	—
4	E	—	—
5	E	—	—
6	E	BL	DC-E (C3-5)
7	+15	OR	DC+15 (C3-6)

EFF

C1

Pin No.	Pin Name	Wire Color	Destination
1	E	BL	A-E (C7-5)
2	PC3	GR	A-PC3 (C7-1)
3	PC2	OR	A-PC2 (C7-3)
4	PC1	YE	A-PC1 (C7-4)
5	E	BL	EFF-E (C1-1)

C2

Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	KC-Vss (C1-1)
2	DP1	OR	KC-OP1 (C3-3)
3	DP3	GR	KC-OP3 (C3-5)
4	—	—	—
5	—	—	—

C3

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	E	BL	PIT-C1-5
3	VIBSP	VI	A-VIBSP (C9-1)
4	VIBDO	BE	A-VIBDO (C9-7)
5	VIBDI	GR	A-VIBDI (C9-4)

C4

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	TRMSO	YE	A-TRMSO (C6-5)
3	TRMSI	OR	A-TRMSI (C6-2)
4	TRMDO	RE	A-TRMDO (C6-1)
5	TRMDI	BR	A-TRMDI (C6-6)

Pin No.
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Pin No.
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Pin No.
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Pin No.
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Pin No.
1
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4

MK3

A

EFF

SELL

C5

Pin No.	Pin Name	Wire Color	Destination
1	C1	SPK	KC-C1 (C8-12)
2	Vss	SPK S	
3	Vss	SSB S	
4	C2	SSB	KC-C2 (C8-11)
5	B1	SGG	KC-B1 (C8-10)
6	Vss	SGG S	
7	Vss	SWH S	
8	B2	SWH	KC-B2 (C8-9)
9	A#1	SGY	KC-A#1 (C8-8)
10	Vss	SGY S	
11	Vss	SVI S	
12	A#2	SVI	KC-A#2 (C8-7)

C6

Pin No.	Pin Name	Wire Color	Destination
1	Vss		
2	L3	SGR	KC-L3 (C4-5)
3	Vss	SGR S	
4	L2	SBE	KC-L2 (C4-6)
5	Vss	SBE S	

C7

Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK3-C1 (C3-1)
2	C2	RE	MK3-C2 (C3-2)
3	B1	OR	MK3-B1 (C3-3)
4	B2	YE	MK3-B2 (C3-4)
5	A#1	GR	MK3-A#1 (C3-5)
6	A#2	BE	MK3-A#2 (C3-6)
7	A1	VI	MK3-A1 (C3-7)
8	A2	GY	MK3-A2 (C3-8)
9	G#1	WH	MK3-G#1 (C3-9)
10	G#2	GG	MK3-G#2 (C3-10)
11	G1	SB	MK3-G1 (C3-11)
12	G2	PK	MK3-G2 (C3-12)

C8

Pin No.	Pin Name	Wire Color	Destination
1	F#1	BR	MK3-F#1 (C1-1)
2	F#2	RE	MK3-F#2 (C1-2)
3	F1	OR	MK3-F1 (C1-3)
4	F2	YE	MK3-F2 (C1-4)
5	E1	GR	MK3-E1 (C1-5)
6	E2	BE	MK3-E2 (C1-6)
7	D#1	VI	MK3-D#1 (C1-7)
8	D#2	GY	MK3-D#2 (C1-8)
9	D1	WH	MK3-D1 (C1-9)
10	D2	GG	MK3-D2 (C1-10)

C9

Pin No.	Pin Name	Wire Color	Destination
1	C#1	SB	MK3-C#1 (C2-1)
2	C#2	PK	MK3-C#2 (C2-2)
3	Vss	BL	MK3-Vss (C2-3)
4	Vss	BL	MK3-Vss (C2-4)
5	Vss	BL	DC-Vss (C2-5)

C1

Pin No.	Pin Name	Wire Color	Destination
1	F#1	BR	MK4-F#1 (C8-1)
2	F#2	RE	MK4-F#2 (C8-2)
3	F1	OR	MK4-F1 (C8-3)
4	F2	YE	MK4-F2 (C8-4)
5	E1	GR	MK4-E1 (C8-5)
6	E2	BE	MK4-E2 (C8-6)
7	D#1	VI	MK4-D#1 (C8-7)
8	D#2	GY	MK4-D#2 (C8-8)
9	D1	WH	MK4-D1 (C8-9)
10	D2	GG	MK4-D2 (C8-10)

C2

Pin No.	Pin Name	Wire Color	Destination
1	C#1	SB	MK4-C#1 (C9-1)
2	C#2	PK	MK4-C#2 (C9-2)
3	Vss	BL	MK4-Vss (C9-3)
4	Vss	BL	MK4-Vss (C9-4)
5	Vss		

C3

Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK4-C1 (C7-1)
2	C2	RE	MK4-C2 (C7-2)
3	B1	OR	MK4-B1 (C7-3)
4	B2	YE	MK4-B2 (C7-4)
5	A#1	GR	MK4-A#1 (C7-5)
6	A#2	BE	MK4-A#2 (C7-6)
7	A1	VI	MK4-A1 (C7-7)
8	A2	GY	MK4-A2 (C7-8)
9	G#1	WH	MK4-G#1 (C7-9)
10	G#2	GG	MK4-G#2 (C7-10)
11	G1	SB	MK4-G1 (C7-11)
12	G2	PK	MK4-G2 (C7-12)

C4

Pin No.	Pin Name	Wire Color	Destination
1	Vss	SBR S	
2	L7	SBR	KC-L7 (C4-1)
3	Vss	SRES	
4	L6	SRE	KC-L6 (C4-2)
5	Vss	SORS	
6	L5	SOR	KC-L5 (C4-3)
7	Vss	SYES	
8	L4	SYE	KC-L4 (C4-4)

C5

Pin No.	Pin Name	Wire Color	Destination
1	Vss		TEST POINT
2	L7		TEST POINT
3	Vss		TEST POINT
4	L6		TEST POINT
5	Vss		TEST POINT
6	L5		TEST POINT
7	Vss		TEST POINT
8	L4		TEST POINT

C6

Pin No.	Pin Name	Wire Color	Destination
1	CM1		TEST POINT
2			
3	CM2		TEST POINT

C1

Pin No.	Pin Name	Wire Color	Destination
1	E	SRES	BAL2 OUT-PIN1
2	E	SORS	BAL2 OUT-PIN1
3	E	SYES	BAL1 OUT-PIN1
4	BAL2A	SRE	BAL2 OUT-PIN2
5	BAL2B	SOR	BAL2 OUT-PIN3
6	E	SGRS	BAL1 OUT-PIN1
7	BAL1A	SYE	BAL1 OUT-PIN2
8	BAL1B	SGR	BAL1 OUT-PIN3

C2

Pin No.	Pin Name	Wire Color	Destination
1	E	SWH S	MIXED OUT-PIN5-E
2	E		
3	E	SBE S	OUTPUT2-PIN5-E
4	MIX	SWH	MIXED OUT-PIN7-HOT
5	E	SVIS	OUTPUT1-PIN5-E
6	OUT2	SBE	OUTPUT2-PIN7-HOT
7	OUT1	SVI	OUTPUT1-PIN7-HOT

C3

Pin No.	Pin Name	Wire Color	Destination
1	E	BL	MKL-EP
2	LAMP	YE	FC-P1-3 F/C-J-pin2
3	HPO1	BR	HP-P1-2 HP-J-R
4	HPO2	RE	HP-P1-1 HP-J-L
5	E	BL	HP-P1-3 HP-J-E

C4

Pin No.	Pin Name	Wire Color	Destination
1	EXP	BE	FC-P1-1 F/C-J-pin4
2	E	BL	FC-P1-2 F/C-J-pin3,8
3	LIN	VI	HP-P1-4 LINE SW Center Terminal
4	E		
5	TRMI2	SBR	EQ-TRMI2 (C2-1)
6	E	SBR S	
7	TRMI1	SRE	EQ-TRMI1 (C2-4)
8	E	SRES	

C5

Pin No.	Pin Name	Wire Color	Destination
1			
2	IC	OR	KC-IC (C1-3)
3	IC		
4	IC		
5	E		
6	EO1	SOR	EQ-EO1 (C1-4)
7	E	SORS	
8	ENSS	GR	SELL-ENSS (C1-4)
9	E	SYES	
10	EO2	SYE	EQ-EO2 (C1-5)

C6

Pin No.	Pin Name	Wire Color	Destination
1	TRMDO	RE	EFF-TRMDO (C4-4)
2	TRMSI	OR	EFF-TRMSI (C4-3)
3			
4	E		
5	TRMSO	YE	EFF-TRMSO (C4-2)
6	TRMPD	GR	FC-P1-7 F/S4P-3
7	TRMSW	BE	SELL-TRMSW (C1-1)
8	TRMDI	BR	EFF-TRMDI (C4-5)

C7

Pin No.	Pin Name	Wire Color	Destination
1	PC3	GR	EFF-PC3 (C1-2)
2	PC0	RE	KC-VIB (C1-2)
3	PC2	OR	EFF-PC2 (C1-3)
4	PC1	YE	EFF-PC1 (C1-4)
5	E	BL	EFF-E (C1-1)

C8

Pin No.	Pin Name	Wire Color	Destination
1	AI2	SBE	FM-AO (C3-5)
2	PC0	RE	KC-VIB (C1-2)
3	E		
4	E	SGR S	FM-E (C3-2)
5	AI1	SGR	FM-AO (C3-4)

C9

Pin No.	Pin Name	Wire Color	Destination
1	VIBSP	VI	EFF-VIBSP (C3-3)
2	VIBPD	GG	FC-P1-8 F/S4P-4
3			
4	VIBDI	GR	EFF-VIBDI (C3-5)
5	E		
6			
7	VIBDO	BE	EFF-VIBDO (C3-4)

C10

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	DC -12 (C3-3)
2	-15	BR	DC -15 (C3-4)
3	E		
4	E		
5	E		
6	E	BL	DC-E (C3-5)
7	+15	OR	DC+15 (C3-6)

C1

Pin No.	Pin Name	Wire Color	Destination
1	E	BL	A-E (C7-5)
2	PC3	GR	A-PC3 (C7-1)
3	PC2	OR	A-PC2 (C7-3)
4	PC1	YE	A-PC1 (C7-4)
5	E	BL	EFF-E (C1-1)

C2

Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	KC-Vss (C1-1)
2	DP1	OR	KC-DP1 (C3-3)
3	DP3	GR	KC-DP3 (C3-5)
4			
5			

C3

Pin No.	Pin Name	Wire Color	Destination
1			
2	E	BL	PIT-C1-5
3	VIBSP	VI	A-VIBSP (C9-1)
4	VIBDO	BE	A-VIBDO (C9-7)
5	VIBDI	GR	A-VIBDI (C9-4)

C4

Pin No.	Pin Name	Wire Color	Destination
1			
2	TRMSO	YE	A-TRMSO (C6-5)
3	TRMSI	OR	A-TRMSI (C6-2)
4	TRMDO	RE	A-TRMDO (C6-1)
5	TRMDI	BR	A-TRMDI (C6-8)

C1

Pin No.	Pin Name	Wire Color	Destination
1	TRMSW	BE	A-TRMSW (C6-7)
2	Vss	BL	DC-Vss (C1-5)
3			
4	ENSS	GR	A-ENSS (C5-8)
5	-12	BE	DC -12 (C1-3)

C2

Pin No.	Pin Name	Wire Color	Destination
1	L1	RE	RW-L1 (C1-2)
2	S1	BR	RW-S1 (C1-1)
3	L2	YE	RW-L2 (C1-4)
4	S2	OR	RW-S2 (C1-3)
5	L3	BE	RW-L3 (C1-5)
6	S3	GR	RW-S3 (C1-6)
7	L4	GY	RW-L4 (C1-8)
8	S4	VI	RW-S4 (C1-7)

C3

Pin No.	Pin Name	Wire Color	Destination
1	STO	GG	RW-STO (C2-9)
2	-7	GR	DC -7 (C1-1)
3	L5	RE	RW-L5 (C2-2)
4	S5	BR	RW-S5 (C2-1)
5	L6	YE	RW-L6 (C2-4)
6	S6	OR	RW-S6 (C2-3)
7	L7	BE	RW-L7 (C2-6)
8	S7	GR	RW-S7 (C2-5)
9	L8	GY	RW-L8 (C2-8)
10	S8	VI	RW-S8 (C2-7)

SELR

C1

Pin No.	Pin Name	Wire Color	Destination
1	ST1	PK	RW-ST1 (C4-9)
2	-7	GR	DC -7 (C5-1)
3	L9	RE	RW-L9 (C3-2)
4	S1	BR	RW-S1 (C3-1)
5	L10	YE	RW-L10 (C3-4)
6	S2	OR	RW-S2 (C3-3)
7	L11	BE	RW-L11 (C3-6)
8	S3	GR	RW-S3 (C3-5)
9	L12	GY	RW-L12 (C3-8)
10	S4	VI	RW-S4 (C3-7)

C2

Pin No.	Pin Name	Wire Color	Destination
1	L13	RE	RW-L13 (C4-2)
2	S5	BR	RW-S5 (C4-1)
3	L14	YE	RW-L14 (C4-4)
4	S6	OR	RW-S6 (C4-3)
5	L15	BE	RW-L15 (C4-6)
6	S7	GR	RW-S7 (C4-5)
7	L16	GY	RW-L16 (C4-8)
8	S8	VI	RW-S8 (C4-7)

EQ

C1

Pin No.	Pin Name	Wire Color	Destination
1	E	—	—
2	E	—	—
3	E	—	—
4	EO1 S OR	A-EO1 (C5-6)	
5	EO2 S YE	A-EO2 (C5-10)	

C2

Pin No.	Pin Name	Wire Color	Destination
1	TRMI2 S BR	A-TRMI2 (C4-5)	
2	-15 BR	DC-15 (C2-4)	
3	+15 OR	DC-15 (C2-6)	
4	TRMI1 S RE	A-TRMI1 (C4-7)	
5	E BL	DC-E (C2-5)	

STO

C1

Pin No.	Pin Name	Wire Color	Destination
1	WRT WH	RW-WRT (C1-9)	
2	-7 GR	DC-7 (C3-1)	
3	—	—	—
4	STRD BR	RW-STRD (C7-1)	
5	-12 BE	LOCK SW-LOCK terminal	

CR

C1

Pin No.	Pin Name	Wire Color	Destination
1	REV RE	RW-REV (C7-2)	
2	—	—	—
3	WEN GR	RW-WEN (C7-5)	
4	WDT RE	RW-WDT (C7-6)	
5	WPR YE	RW-WPR (C7-4)	
6	MSW OR	RW-MSW (C7-3)	
7	CLD VI	RW-CLD (C7-7)	
8	MON GY	RW-MON (C7-8)	
9	RCK WH	RW-RCK (C7-9)	
10	RDT GG	RW-RDI (C7-10)	
11	+5V GR	RW-7 (C7-11)	
12	GND RE	RW-12 (C7-12)	

C2

Pin No.	Pin Name	Wire Color	Destination
1	MG BE	DC-12 (C2-3)	
2	MG	—	—
3	MSV GR	DC-7 (C2-1)	

DC

C1

Pin No.	Pin Name	Wire Color	Destination
1	-7 GR	SELL-7 (C3-2)	
2	Vss	—	—
3	-12 BE	SELL-12 (C1-5)	
4	-15	—	—
5	Vss BL	SELL-Vss (C1-2)	
6	+15	—	—

C2

Pin No.	Pin Name	Wire Color	Destination
1	-7 GR	CR-MSV (C2-3)	
2	Vss BL	MK4-Vss (C9-5)	
3	-12 BE	CR-MG (C2-1)	
4	-15 BR	EQ-15 (C2-2)	
5	E BL	EQ-E (C2-5)	
6	+15 OR	EQ-15 (C2-3)	

C3

Pin No.	Pin Name	Wire Color	Destination
1	-7 GR	STO-7 (C1-2)	
2	Vss	—	—
3	-12 BE	A-12 (C10-1)	
4	-15 BR	A-15 (C10-2)	
5	E BL	A-E (C10-6)	
6	+15 OR	A-15 (C10-7)	

C4

Pin No.	Pin Name	Wire Color	Destination
1	-7 GR	RW-7 (C8-1)	
2	Vss BL	RW-Vss (C8-2)	
3	-12 BE	RW-12 (C8-3)	
4	-15	—	—
5	E	—	—
6	+15	—	—

C5

Pin No.	Pin Name	Wire Color	Destination
1	-7 GR	SELR-7 (C1-2)	
2	Vss BL	FM-Vss (C2-2)	
3	-12 BE	FM-12 (C2-3)	
4	-15 BR	FM-15 (C2-6)	
5	E BL	FM-E (C2-5)	
6	+15 OR	FM-15 (C2-4)	

C6

Pin No.	Pin Name	Wire Color	Destination
1	-7 GR	KC-7 (C7-1)	
2	Vss BL	KC-Vss (C7-2)	
3	-12 BE	KC-12 (C7-3)	
4	-15	—	—
5	E BL	KC-E (C7-5)	
6	+15 OR	KC-15 (C7-6)	

C7

Pin No.	Pin Name	Wire Color	Destination
1	-12 BE	RW-12 (C9-1)	
2	—	—	—
3	PON GR	RW-PON (C9-2)	
4	—	—	—
5	-7B V1	RW-7B (C9-3)	

C8

Pin No.	Pin Name	Wire Color	Destination
1	-12 BE	BB UNIT ⊖	
2	—	—	—
3	-7B V1	BB UNIT ⊕	

BB UNIT

C1

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	-12 BE	DC-12 (C8-1)	
3	—	—	—
4	-7B V1	DC-7B (C8-3)	

PGM UNIT

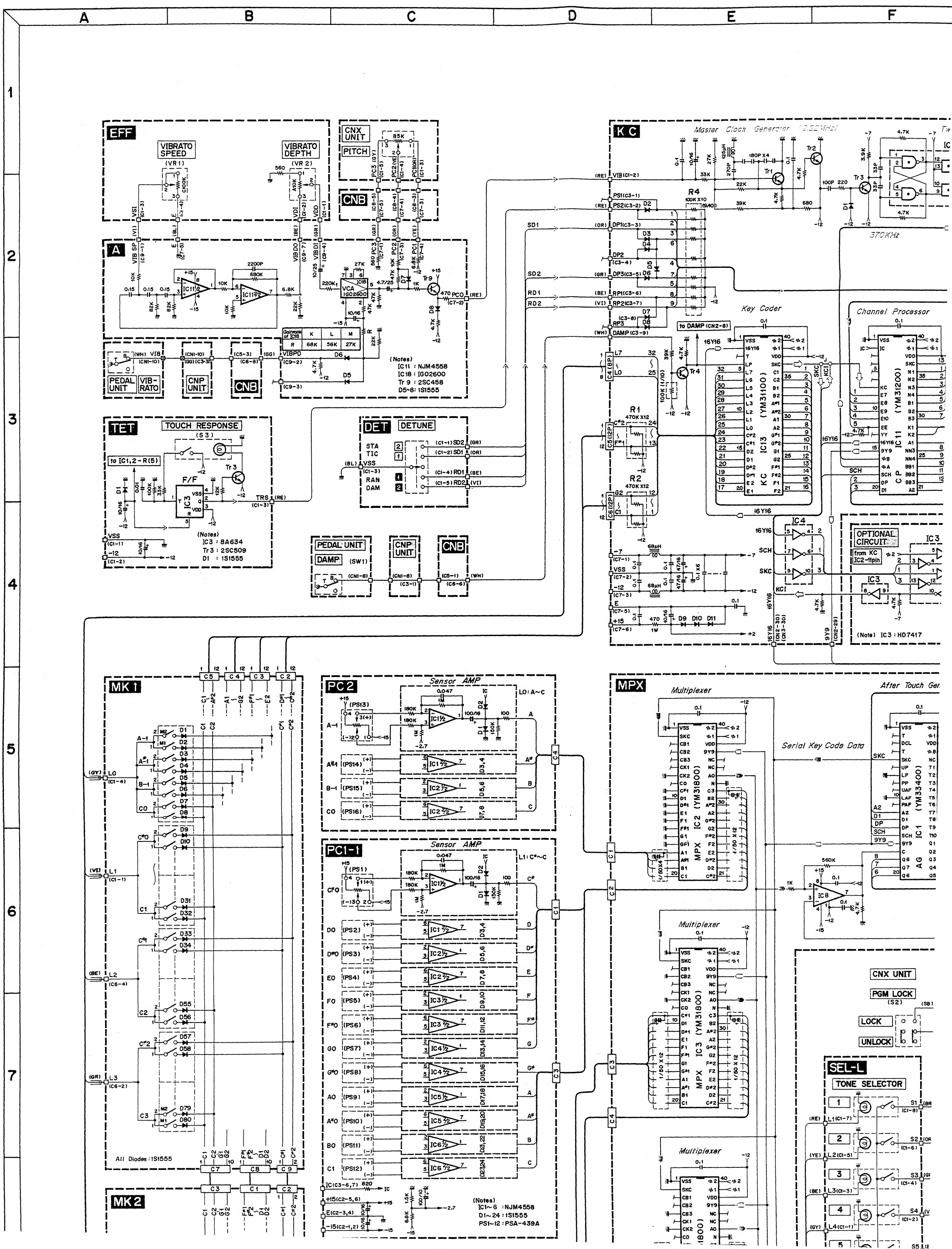
CN No.	CN Name	Destination
CN1	24P connector	(to RW-CN5)

LOCK SW

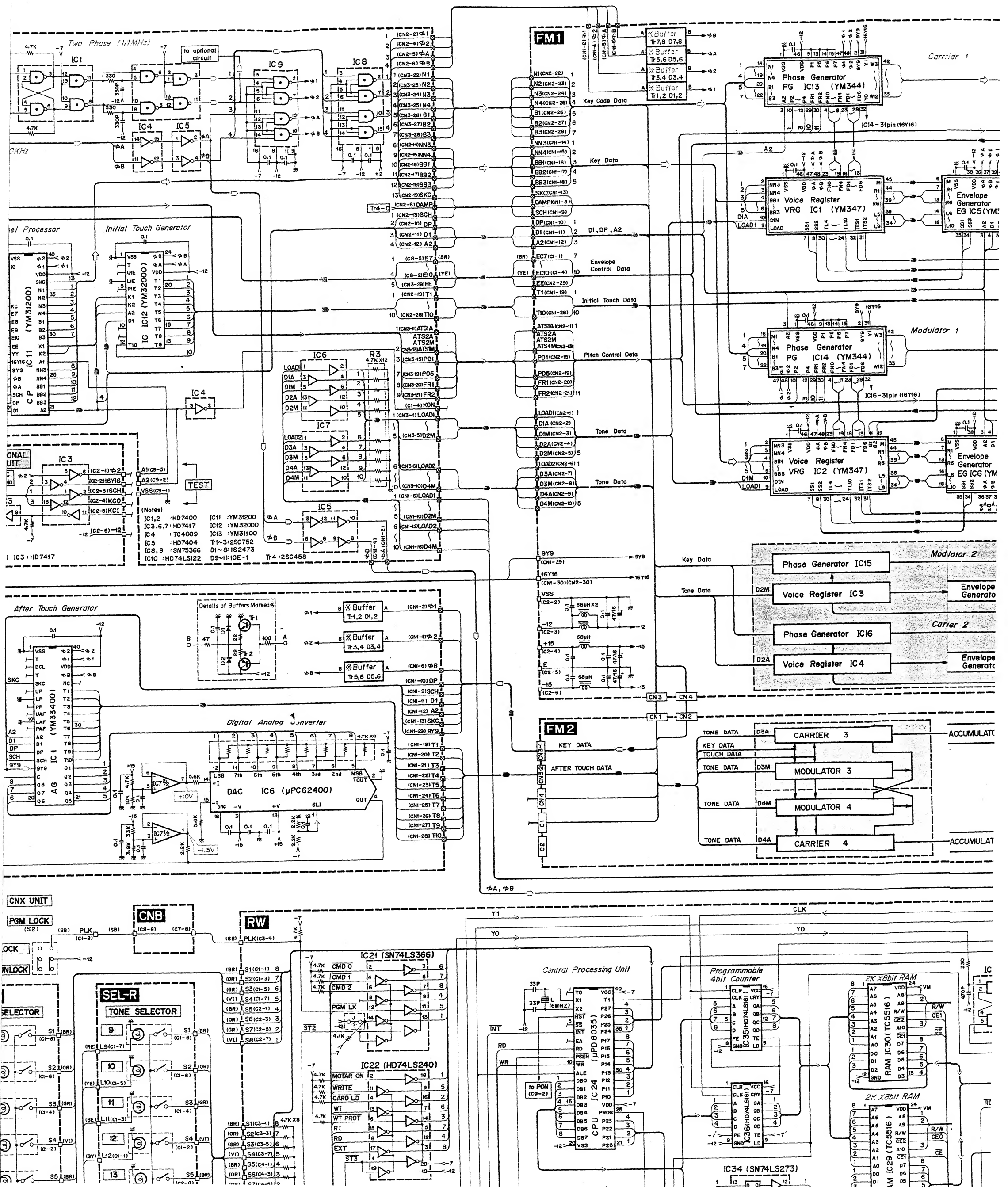
Pin No.	Pin Name	Wire Color	Destination
1	CENTER TERMINAL	WH	RW-PLK (C3-9)
2	LOCK TERMINAL	BE	RW-12 (C1-10)
3	—	BE	STO-12 (C1-5)

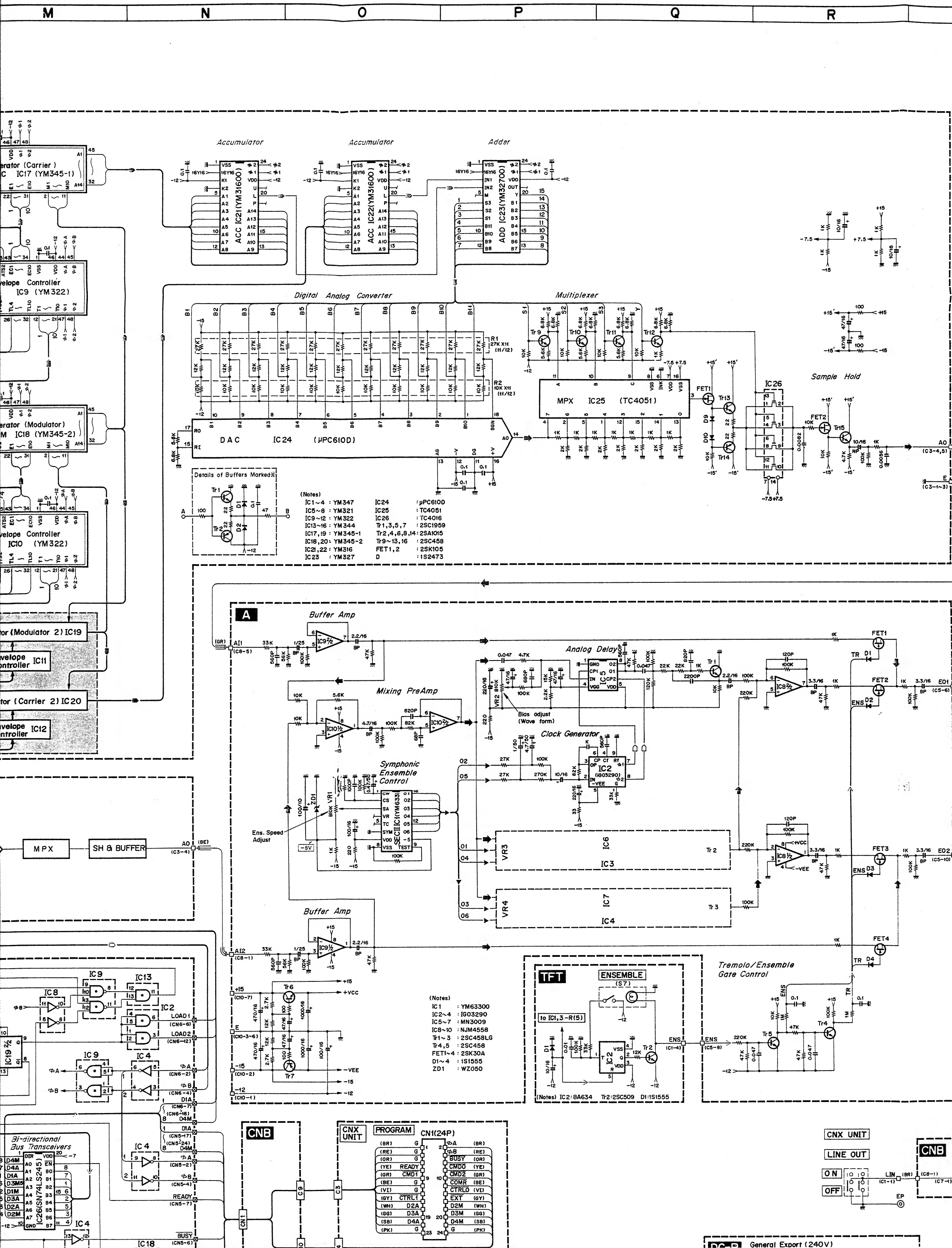
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GS1 OVERALL CIRCUIT DIAGRAM

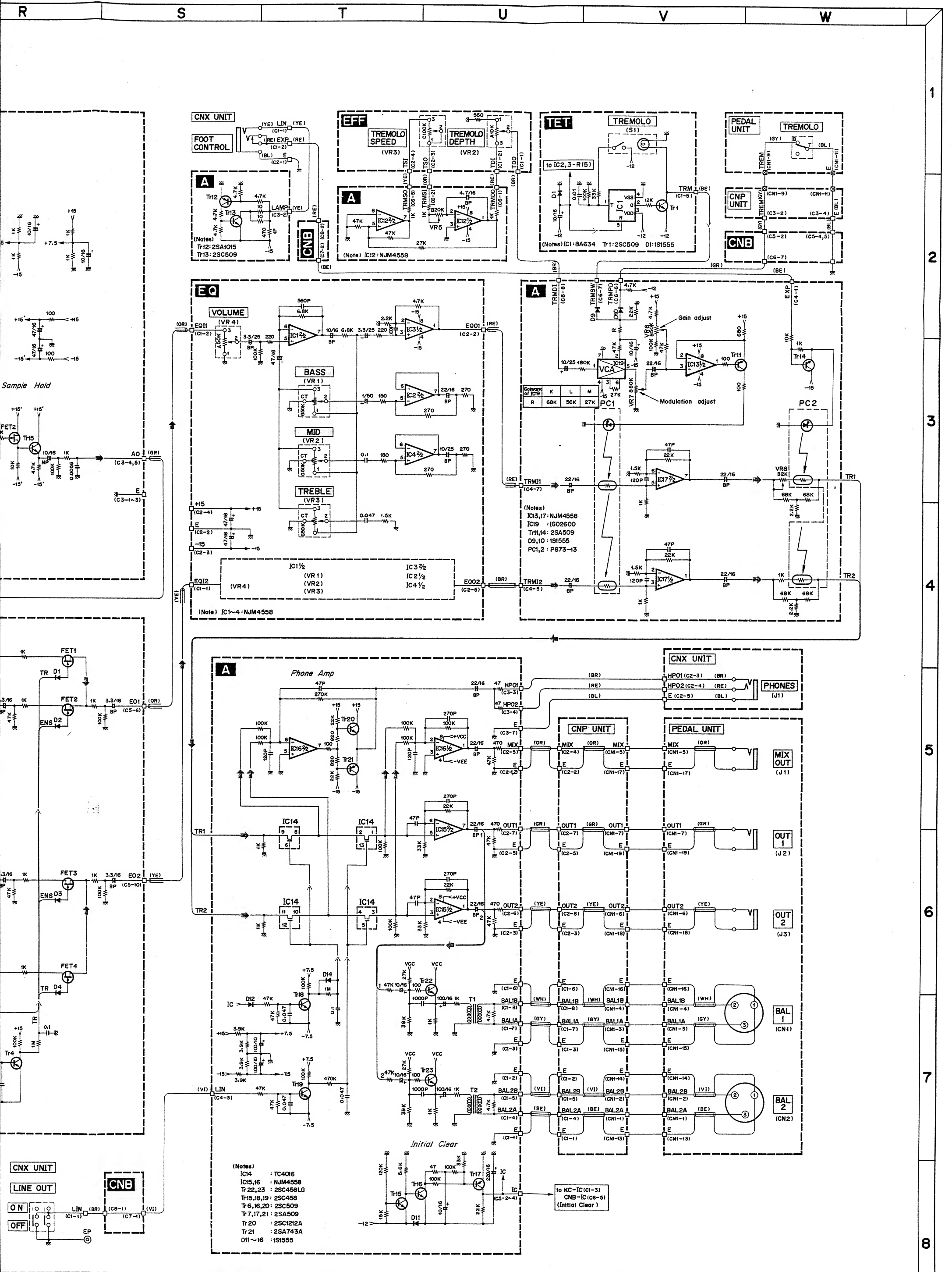


F	G	H	I	J	K	L
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GS1 OVERALL CIRCUIT DIAGRAM



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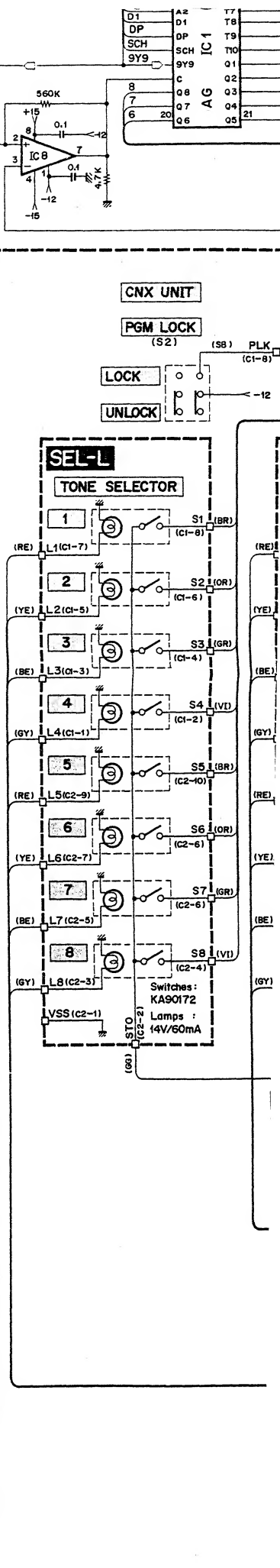
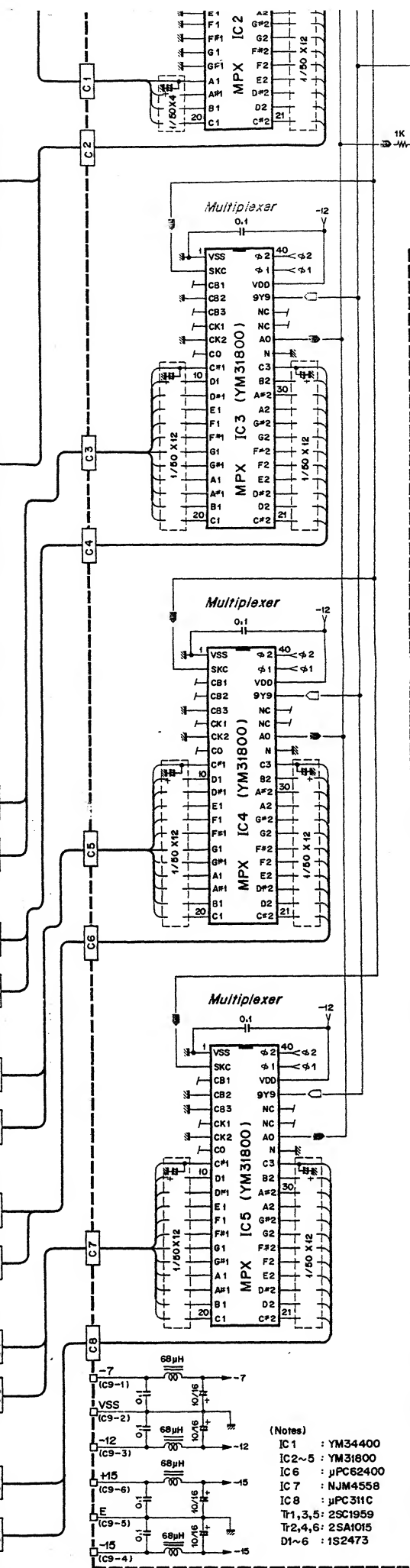
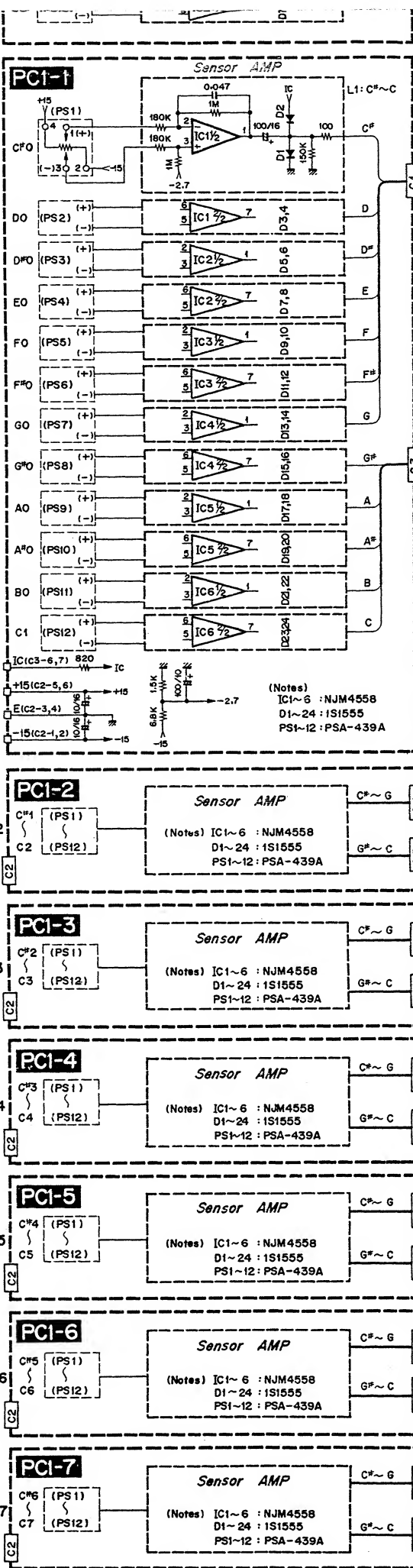
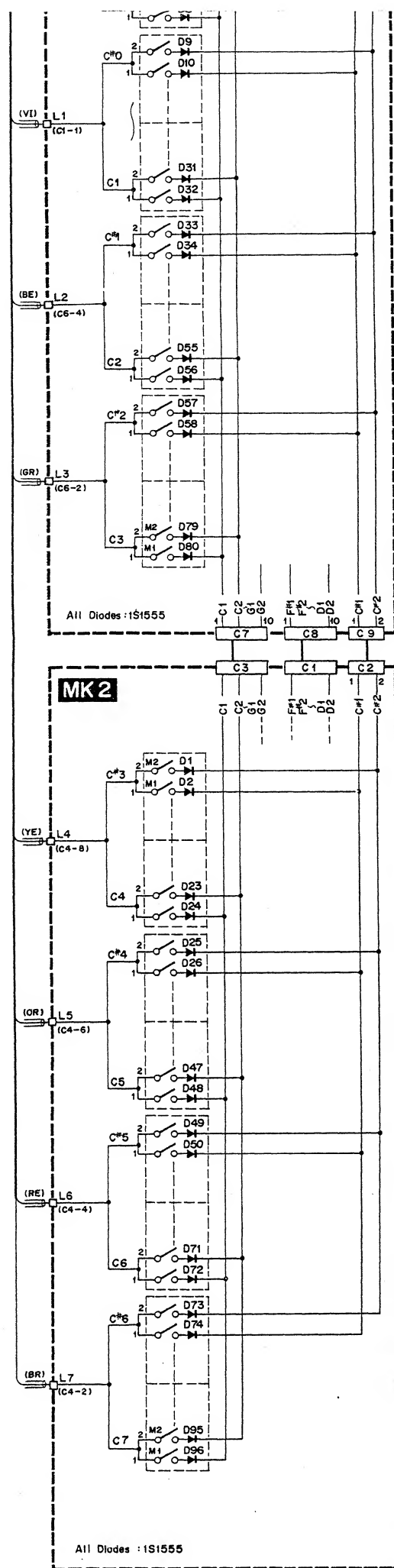
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13



KC

C1			
Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	DET-Vss (C1-3)
2	V18	RE	A-PCO (C7-2)
3	IC	OR	A-IC (C5-2)
4			
5			

C2			
Pin No.	Pin Name	Wire Color	Destination
1	φ2		
2	16Y16		
3	SCH		
4	KCO		
5	KCI		
6	-12		

C3			
Pin No.	Pin Name	Wire Color	Destination
1	PS1		
2	PS2	RE	TET-TR5 (C1-3)
3	DP1	OR	DET-SD1 (C1-2)
4	DP2		
5	DP3	GR	DET-SD2 (C1-1)
6	RP1	BE	DET-RD1 (C1-4)
7	RP2	VI	DET-RD2 (C1-5)
8	RP3		
9	DAMP	WH	CN8-DAMP (C6-6)
10			

C6			
Pin No.	Pin Name	Wire Color	Destination
1	G2	S BR	MK1-G2 (C4-12)
2	G1	S RE	MK1-G1 (C4-9)
3	G#2	S OR	MK1-G#2 (C4-8)
4	G#1	S YE	MK1-G#1 (C4-5)
5	A2	S GR	MK1-A2 (C4-4)
6	A1	S BE	MK1-A1 (C4-1)
7	A#2	S VI	MK1-A#2 (C5-12)
8	A#1	S GY	MK1-A#1 (C5-9)
9	B2	S WH	MK1-B2 (C5-8)
10	B1	S GG	MK1-B1 (C5-5)
11	C2	S SB	MK1-C2 (C5-4)
12	C4	S PK	MK1-C1 (C5-1)

C7			
Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	DC-7 (C7-1)
2	Vss	BL	DC-Vss (C7-2)
3	-12	BE	DC-12 (C7-3)
4			
5	E	BL	DC-E (C7-5)
6	+15	OR	DC+15 (C7-6)

C8			
Pin No.	Pin Name	Wire Color	Destination
1			
2	E10	YE	FM1-E10 (C1-4)
3	EB	OR	FM1-E9 (C1-3)
4	EB	RE	FM1-E8 (C1-2)
5	E7	BR	FM1-E7 (C1-1)

FM1

C1			
Pin No.	Pin Name	Wire Color	Destination
1	E7	BR	KC-E7 (C5-5)
2	EB	RE	KC-E8 (C5-4)
3	EB	OR	KC-E9 (C5-3)
4	E10	YE	KC-E10 (C5-2)
5			

C2			
Pin No.	Pin Name	Wire Color	Destination
1			
2	Vss	BL	DC-Vss (C6-2)
3	-12	BE	DC-12 (C6-3)
4	+15	OR	DC+15 (C6-6)
5	E	BL	DC-E (C6-5)
6	-15	BR	DC-15 (C6-4)

C3			
Pin No.	Pin Name	Wire Color	Destination
1	E		
2	E		
3	S GR	S	A-E (C8-4)
4	AO	S GR	A-A11 (C8-5)
5	AO		

MPX

C1			
Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	PCB-C (C1-4)
2	BO	PK	PCB-B (C1-3)
3	A#0	SB	PCB-A# (C1-2)
4	AO	GG	PCB-A (C1-1)
5			

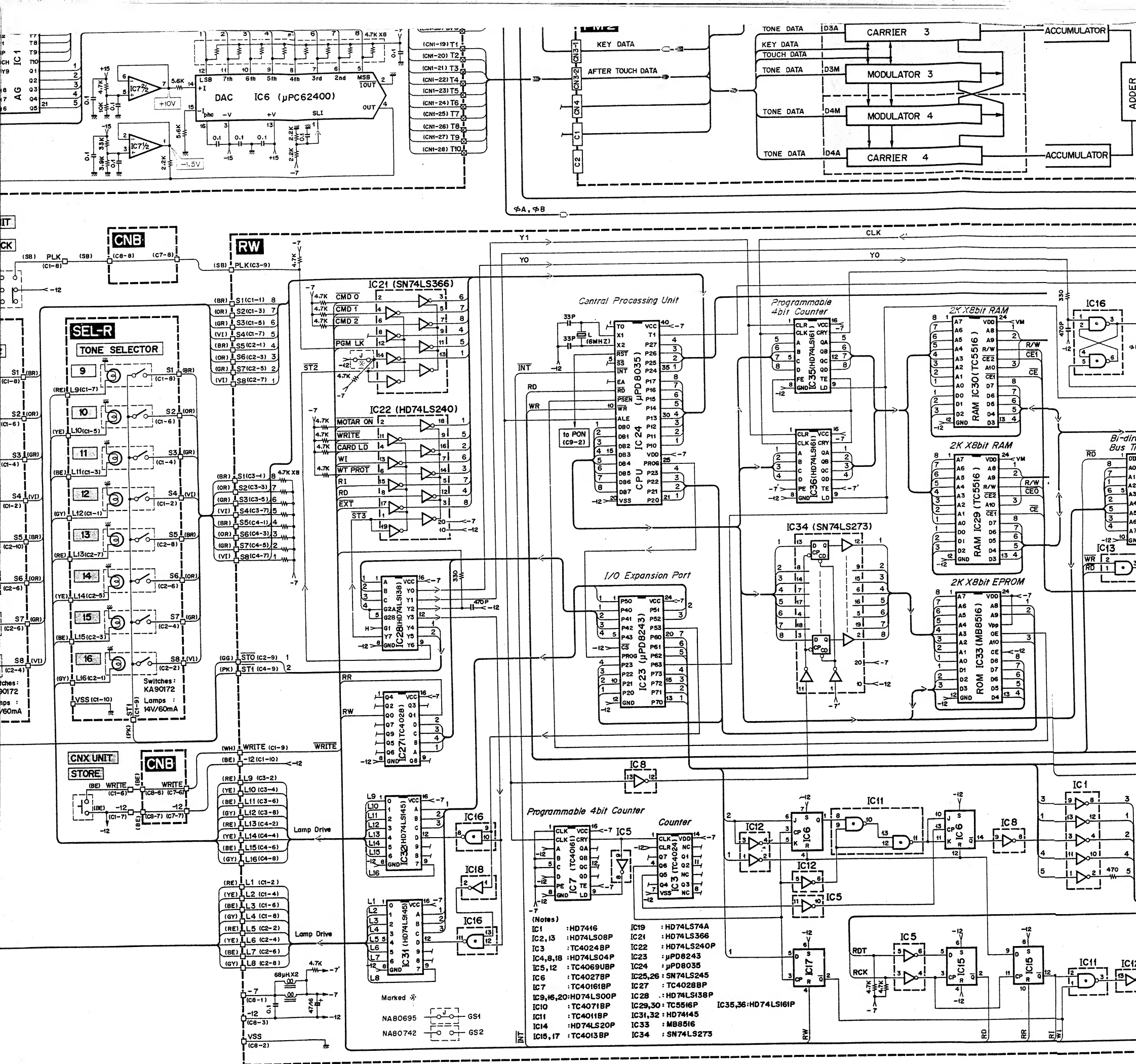
C2			
Pin No.	Pin Name	Wire Color	Destination
1	C2	BR	PCA1-C (C1-5)
2	B1	PK	PCA1-B (C1-4)
3	A#1	SB	PCA1-A# (C1-3)
4	A1	GG	PCA1-A (C1-2)
5	G#1	WH	PCA1-G# (C1-1)
6	G1	GY	PCA1-G (C1-7)
7	F#1	VI	PCA1-F# (C1-6)
8	F1	BE	PCA1-F (C1-5)
9	E1	GR	PCA1-E (C1-4)
10	D#1	YE	PCA1-D# (C1-3)
11	D1	OR	PCA1-D (C1-2)
12	C#1	RE	PCA1-C# (C1-1)

C3			
Pin No.	Pin Name	Wire Color	Destination
1	C3	BR	PCA2-C (C1-5)
2	B2	PK	PCA2-B (C1-4)
3	A#2	SB	PCA2-A# (C1-3)
4	A2	GG	PCA2-A (C1-2)
5	G#2	WH	PCA2-G# (C1-1)
6	G2	GY	PCA2-G (C1-7)
7	F#2	VI	PCA2-F# (C1-6)
8	F#2	BE	PCA2-F (C1-5)

C1			
Pin No.	Pin Name	Wire Color	Destination
1	S1	BR	SELL-S1 (C1-8)
2	L1	RE	SELL-L1 (C1-7)
3	S2	OR	SELL-S2 (C1-6)
4	L2	YE	SELL-L2 (C1-5)
5	S3	GR	SELL-S3 (C1-4)
6	L3	BE	SELL-L3 (C1-3)
7	S4	VI	SELL-S4 (C1-2)
8	L4	GY	SELL-L4 (C1-1)
9	WRITE	WH	CN8-WRITE (C7-6)
10	-12	BE	CN8-12 (C7-7)

C2			
Pin No.	Pin Name	Wire Color	Destination
1	S5	BR	SELL-S5 (C2-10)
2	L5	RE	SELL-L5 (C2-9)
3	S6	OR	SELL-S6 (C2-8)
4	L6	YE	SELL-L6 (C2-7)
5	S7	GR	SELL-S7 (C2-6)
6	L7	BE	SELL-L7 (C2-5)
7	S8	VI	SELL-S8 (C2-4)
8	L8	GY	SELL-L8 (C2-3)
9	STO	GG	SELL-STO (C2-2)
10	Vss	BL	SELL-Vss (C1-4)

C3			
Pin No.	Pin Name	Wire Color	Destination
1	S1	BR	SELR-S1 (C1-8)
2	L1	RE	SELR-L1 (C1-7)
3	S2	OR	SELR-S2 (C1-6)
4	L10	YE	SELR-L10 (C1-5)
5	S3	GR	SELR-S3 (C1-4)



RW

C1

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	DC-7 (C3-1)
2	Vss	BL	DC-Vss (C3-2)
3	-12	BE	DC-12 (C3-3)
4			
5			
6			

Pin No.	Pin Name	Wire Color	Destination
1	D #1	SBE	KC-D #1 (C5-6)
2	Vss	SBS	
3	Vss	SGR	
4	D #2	SGR	KC-D #2 (C5-5)
5	D1	SYE	KC-D1 (C5-4)
6	Vss	SYE	
7	Vss	SOR	
8	D2	SOR	KC-D2 (C5-3)
9	C #1	SRE	KC-C #1 (C5-2)
10	Vss	SRES	
11	Vss	SBR	
12	C #2	SBR	KC-C #2 (C5-1)

C2

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	DC-12 (C11-1)
2	PON	PK	DC-PON (C11-2)
3	-7B	VI	DC-7B (C11-3)

Pin No.	Pin Name	Wire Color	Destination
1	F #1	SPK	KC-F #1 (C5-12)
2	Vss	SPK	
3	Vss	SSB	
4	F #2	SSB	KC-F #2 (C5-11)
5	F1	SGG	KC-F1 (C5-10)
6	Vss	SGG	
7	Vss	SWH	
8	F2	SWH	KC-F2 (C5-9)
9	F1	SGV	KC-F1 (C5-8)

C3

Pin No.	Pin Name	Wire Color	Destination
1	SRLR-S1	IC1-8	
2	SRLR-L9	IC1-7	
3	SRLR-S2	IC1-6	
4	SRLR-L10	IC1-5	
5	SRLR-S3	IC1-4	
6	SRLR-L11	IC1-3	
7	SRLR-S4	IC1-2	
8	SRLR-L12	IC1-1	

MK1

C1

Pin No.	Pin Name	Wire Color	Destination
1	L1	S VI	KC-L1 (C4-7)
2	Vss	S VIS	
3	Vss	S GY S	
4	LO	S GY	KC-LO (C4-8)

C2

Pin No.	Pin Name	Wire Color	Destination
1	D #1	SBE	KC-D #1 (C5-6)
2	Vss	SBS	
3	Vss	SGR	
4	D #2	SGR	KC-D #2 (C5-5)
5	D1	SYE	KC-D1 (C5-4)
6	Vss	SYE	
7	Vss	SOR	
8	D2	SOR	KC-D2 (C5-3)
9	C #1	SRE	KC-C #1 (C5-2)
10	Vss	SRES	
11	Vss	SBR	
12	C #2	SBR	KC-C #2 (C5-1)

C3

Pin No.	Pin Name	Wire Color	Destination
1	F #1	SPK	KC-F #1 (C5-12)
2	Vss	SPK	
3	Vss	SSB	
4	F #2	SSB	KC-F #2 (C5-11)
5	F1	SGG	KC-F1 (C5-10)
6	Vss	SGG	
7	Vss	SWH	
8	F2	SWH	KC-F2 (C5-9)
9	F1	SGV	KC-F1 (C5-8)

C6

Pin No.	Pin Name	Wire Color	Destination
1	Vss	-	-
2	L3	SGR	KC-L3 (C4-6)
3	Vss	SGR S	
4	L2	S BE	KC-L2 (C4-6)
5	Vss	S BE S	

C7

Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK2-C1 (C3-1)
2	C2	RE	MK2-C2 (C3-2)
3	B1	OR	MK2-B1 (C3-3)
4	B2	YE	MK2-B2 (C3-4)
5	A #1	GR	MK2-A #1 (C3-6)
6	A #2	BE	MK2-A #2 (C3-6)
7	A1	VI	MK2-A1 (C3-7)
8	A2	GY	MK2-A2 (C3-8)
9	G #1	WH	MK2-G #1 (C3-9)
10	G #2	GG	MK2-G #2 (C3-10)
11	G1	SB	MK2-G1 (C3-11)
12	G2	PK	MK2-G2 (C3-12)

C8

Pin No.	Pin Name	Wire Color	Destination
1	F #1	BR	MK2-F #1 (C1-1)
2	F #2	RE	MK2-F #2 (C1-2)
3	F1	OR	MK2-F1 (C1-3)
4	F2	YE	MK2-F2 (C1-4)
5	E1	GR	MK2-E1 (C1-5)
6	E2	BE	MK2-E2 (C1-6)
7	D #1	VI	MK2-D #1 (C1-7)
8	D #2	GY	MK2-D #2 (C1-8)
9	D1	WH	MK2-D1 (C1-9)

MK2

C1

Pin No.	Pin Name	Wire Color	Destination
1	F #1	BR	MK1-F #1 (C8-1)
2	F #2	RE	MK1-F #2 (C8-2)
3	F1	OR	MK1-F1 (C8-3)
4	F2	YE	MK1-F2 (C8-4)
5	E1	GR	MK1-E1 (C8-5)
6	E2	BE	MK1-E2 (C8-6)
7	D #1	VI	MK1-D #1 (C8-7)
8	D #2	GY	MK1-D #2 (C8-8)
9	D1	WH	MK1-D1 (C8-9)
10	D2	GG	MK1-D2 (C8-10)

C2

Pin No.	Pin Name	Wire Color	Destination
1	C #1	SB	MK1-C #1 (C9-1)
2	C #2	PK	MK1-C #2 (C9-2)
3	Vss	BL	MK1-Vss (C9-3)
4	Vss	BL	MK1-Vss (C9-4)
5	Vss	-	-

C3

Pin No.	Pin Name	Wire Color	Destination
1	C1	BR	MK1-C1 (C7-1)
2	C2	RE	MK1-C2 (C7-2)
3	B1	OR	MK1-B1 (C7-3)
4	B2	YE	MK1-B2 (C7-4)
5	A #1	GR	MK1-A #1 (C7-5)
6	A #2	BE	MK1-A #2 (C7-6)
7	A1	VI	MK1-A1 (C7-7)
8	A2	GY	MK1-A2 (C7-8)
9	G #1	WH	MK1-G #1 (C7-9)
10	G #2	GG	MK1-G #2 (C7-10)
11	G1	SB	MK1-G1 (C7-11)

PCA1

C1

Pin No.	Pin Name	Wire Color	Destination
1	C #	RE	MPX-G1 (C2-12)
2	D	OR	MPX-D1 (C2-11)
3	D #	YE	MPX-D #1 (C2-10)
4	E	GR	MPX-E1 (C2-9)
5	F	BE	MPX-F1 (C2-8)
6	F #	VI	MPX-F #1 (C2-7)
7	G	GY	MPX-G1 (C2-6)

C2

Pin No.	Pin Name	Wire Color	Destination
1	-15	BR	CNB-15 (C4-3)
2	-15	BR	PCA2-15 (C2-1)
3	E	BL	CNB-E (C4-5)
4	E	BL	PCA2-E (C2-3)
5	+15	RE	CNB-15S (C4-7)
6	+15	RE	PCA2+15 (C2-6)
7	-	-	-

C3

Pin No.	Pin Name	Wire Color	Destination
1	G #	WH	MPX-G #1 (C2-5)
2	A	GG	MPX-A1 (C2-4)
3	A #	SB	MPX-A #1 (C2-3)
4	B	PK	MPX-B1 (C2-2)
5	C	BR	MPX-C2 (C2-1)
6	IC	GY	CNB-IC (C4-1)
7	IC	GY	PCA2-IC (C3-6)

PCA3

C1

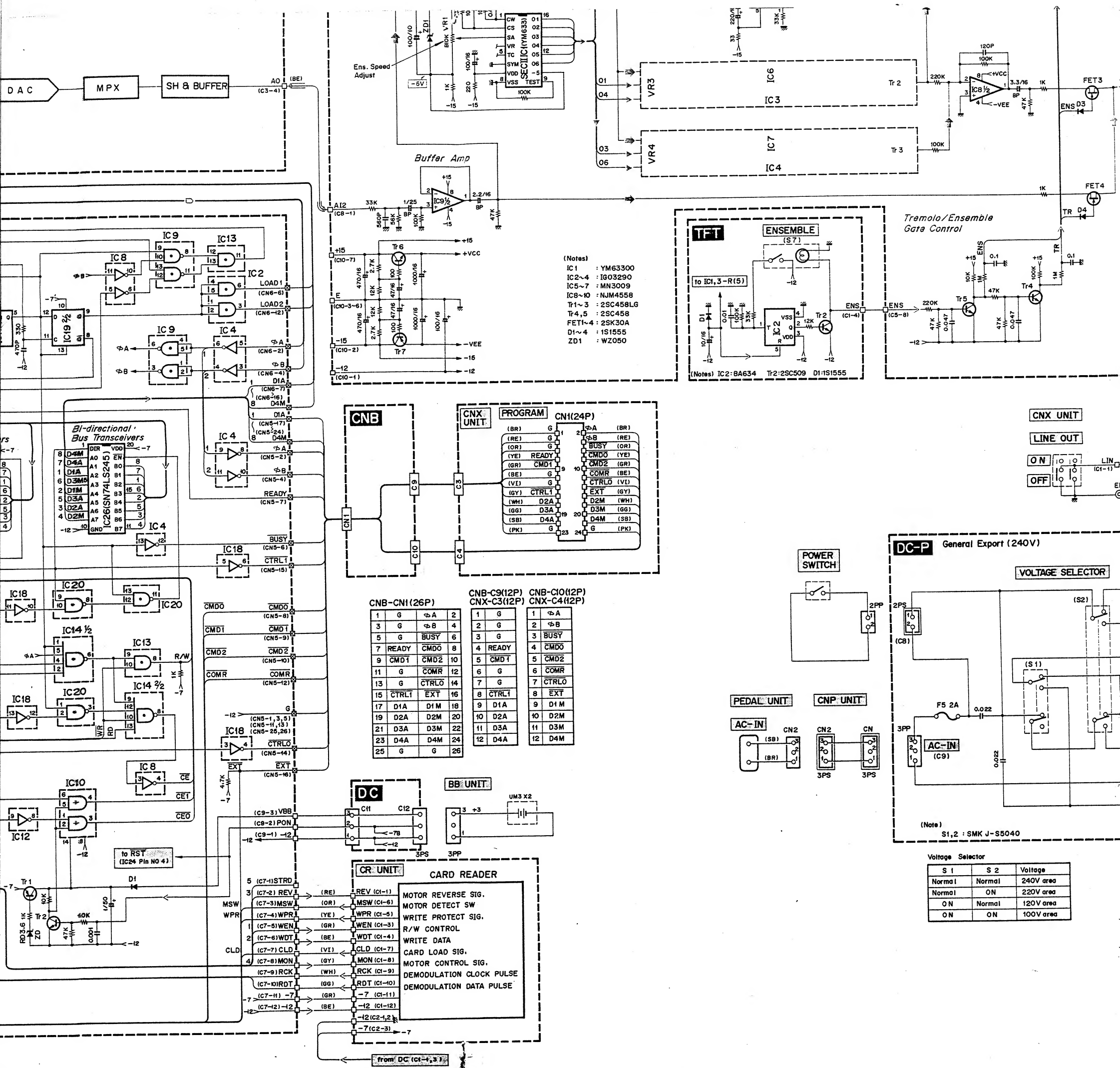
Pin No.	Pin Name	Wire Color	Destination
1	C #	RE	MPX-C #1 (C4-12)
2	D	OR	MPX-D (C4-11)
3	D #	YE	MPX-D #1 (C4-10)
4	E	GR	MPX-E (C4-9)
5	F	BE	MPX-F (C4-8)
6	F #	VI	MPX-F #1 (C4-7)
7	G	GY	MPX-G (C4-6)

C2

Pin No.	Pin Name	Wire Color	Destination
1	-15	BR	PCA2-15 (C2-2)
2	-15	BR	PCA2-15 (C2-1)
3	E	BL	PCA2-E (C2-3)
4	E	BL	PCA2-E (C2-3)
5	+15	OR	PCA2+15 (C2-6)
6	+15	OR	PCA2+15 (C2-6)
7	-	-	-

C3

Pin No.	Pin Name	Wire Color	Destination
1	G #	WH	MPX-G #1 (C4-6)
2	A	GG	MPX-A3 (C4-4)
3	A #	SB	MPX-A #1 (C4-3)
4	B	PK	MPX-B3 (C4-2)
5	C	BR	MPX-C4 (C4-1)
6	IC	GY	PCA2-IC (C3-7)
7	IC	GY	PCA4-IC (C3-6)



PCA5

Pin No.	Pin Name	Wire Color	Destination
1	RE	MPX-C #5 (C8-12)	
2	OR	MPX-D5 (C8-11)	
3	D #	MPX-D #5 (C8-10)	
4	GR	MPX-E5 (C8-9)	
5	BE	MPX-F5 (C8-8)	
6	VI	MPX-F #5 (C8-7)	
7	GY	MPX-G5 (C8-6)	

PCA7

Pin No.	Pin Name	Wire Color	Destination
1	C #	RE	MPX-C #7 (C8-12)
2	D	OR	MPX-D7 (C8-11)
3	D #	YE	MPX-D #7 (C8-10)
4	E	GR	MPX-E7 (C8-9)
5	F	BE	MPX-F7 (C8-8)
6	F #	VI	MPX-F #7 (C8-7)
7	G	GY	MPX-G7 (C8-6)

PCA8

Pin No.	Pin Name	Wire Color	Destination
1	G #	WH	MPX-G #7 (C8-5)
2	A	GG	MPX-A5 (C8-4)
3	A #	SB	MPX-A #5 (C8-3)
4	B	PK	MPX-B5 (C8-2)
5	C	BR	MPX-C5 (C8-1)
6	IC	GY	PCA8-IC (C3-7)
7	IC	GY	PCA8-IC (C3-6)

A

Pin No.	Pin Name	Wire Color	Destination
1	E	S BE S	
2	E	S VI S	
3	E	S GY S	
4	BAL2A	S BE	CNP-BAL2A (C1-4)
5	BAL2B	S VI	CNP-BAL2B (C1-5)
6	E	S WH S	
7	BAL1A	S GY	CNP-BAL1A (C1-7)
8	BAL1B	S WH	CNP-BAL1B (C1-8)

Pin No.	Pin Name	Wire Color	Destination
1	E	-	-
2	E	S OR S	-
3	E	S YE S	-
4	MIX	S OR	CNP-MIX (C2-4)
5	E	S GR S	-
6	OUT2	S YE	CNP-OUT2 (C2-6)
7	OUT1	S GR	CNP-OUT1 (C2-7)

Pin No.	Pin Name	Wire Color	Destination
1	G #	WH	MPX-G #7 (C8-5)
2	A	GG	MPX-A7 (C8-4)
3	A #	SB	MPX-A #7 (C8-3)
4	B	PK	MPX-B7 (C8-2)
5	C	BR	MPX-C8 (C8-1)
6	IC	GY	PCA8-IC (C3-7)
7	IC	-	-

C4

Pin No.	Pin Name	Wire Color	Destination
1	PC3	GR	CNB-PC3 (C7-5)
2	PC0	RE	KC-V18 (C1-2)
3	PC2	OR	CNB-PC2 (C7-4)
4	PC1	YE	CNB-PC1 (C7-3)
5	E	BL	EFF-E (C1-4)

Pin No.	Pin Name	Wire Color	Destination
1	A12	S BE	FM2-AO (C3-4)
2	E	S BE S	FM2-E (C3-3)
3	E	-	-
4	E	S GR S	FM1-E (C3-3)
5	A11	S GR	FM1-AO (C3-4)

Pin No.	Pin Name	Wire Color	Destination
1	V18SP	VI	EFF-VSI (C1-3)
2	V18PD	GG	CNB-V18 (C8-8)
3	-	-	-
4	V18DI	GR	EFF-VDO (C1-1)
5	E	-	-
6	-	-	-
7	V18DO	BE	EFF-VDI (C1-2)

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	CNB-12 (C2-1)
2	-15	BR	CNB-15 (C2-3)
3	E	-	-

EFF

Pin No.	Pin Name	Wire Color	Destination
1	VDD	GR	A-V18DI (C9-4)
2	VDI	BE	A-V18DO (C9-7)
3	VSI	VI	A-V18SP (C9-1)
4	E	BL	A-E (C7-5)
5	E	-	-

Pin No.	Pin Name	Wire Color	Destination
1	TDO	BR	A-TRMDI (C8-8)
2	TDI	RE	A-TRMDO (C8-1)
3	TSD	OR	A-TRMDI (C8-2)
4	TSI	YE	A-TRMSO (C8-5)
5	-	-	-

TET

Pin No.	Pin Name	Wire Color	Destination
1	Vss	BL	CNB-Vss (C8-3)
2	-12	BE	CNB-12 (C8-1)
3	TRS	RE	KC-PS2 (C3-2)
4	ENS	GR	A-ENSS (C8-8)
5	TRM	BE	A-TRMSW (C8-6)

SELR

Pin No.	Pin Name	Wire Color	Destination
1	L12	GY	RW-L12 (C3-8)
2	S4	VI	RW-S4 (C3-7)
3	L11	BE	RW-L11 (C3-6)
4	S3	GR	RW-S3 (C3-6)
5	L10	YE	RW-L10 (C3-4)
6	S2	OR	RW-S2 (C3-3)
7	L9	RE	RW-L9 (C3-2)
8	S1	BR	RW-S1 (C3-1)
9	ST1	PK	RW-ST1 (C4-8)
10	Vss	BL	RW-Vss (C4-10)

Pin No.	Pin Name	Wire Color	Destination
1	L16	GY	RW-L16 (C4-8)
2	S8	VI	RW-S8 (C4-7)
3	L15	BE	RW-L15 (C4-6)
4	S7	GR	RW-S7 (C4-6)
5	L14	YE	RW-L14 (C4-4)
6	S6	OR	RW-S6 (C4-3)
7	L13	RE	RW-L13 (C4-2)
8	S5	BR	RW-S5 (C4-1)

EQ

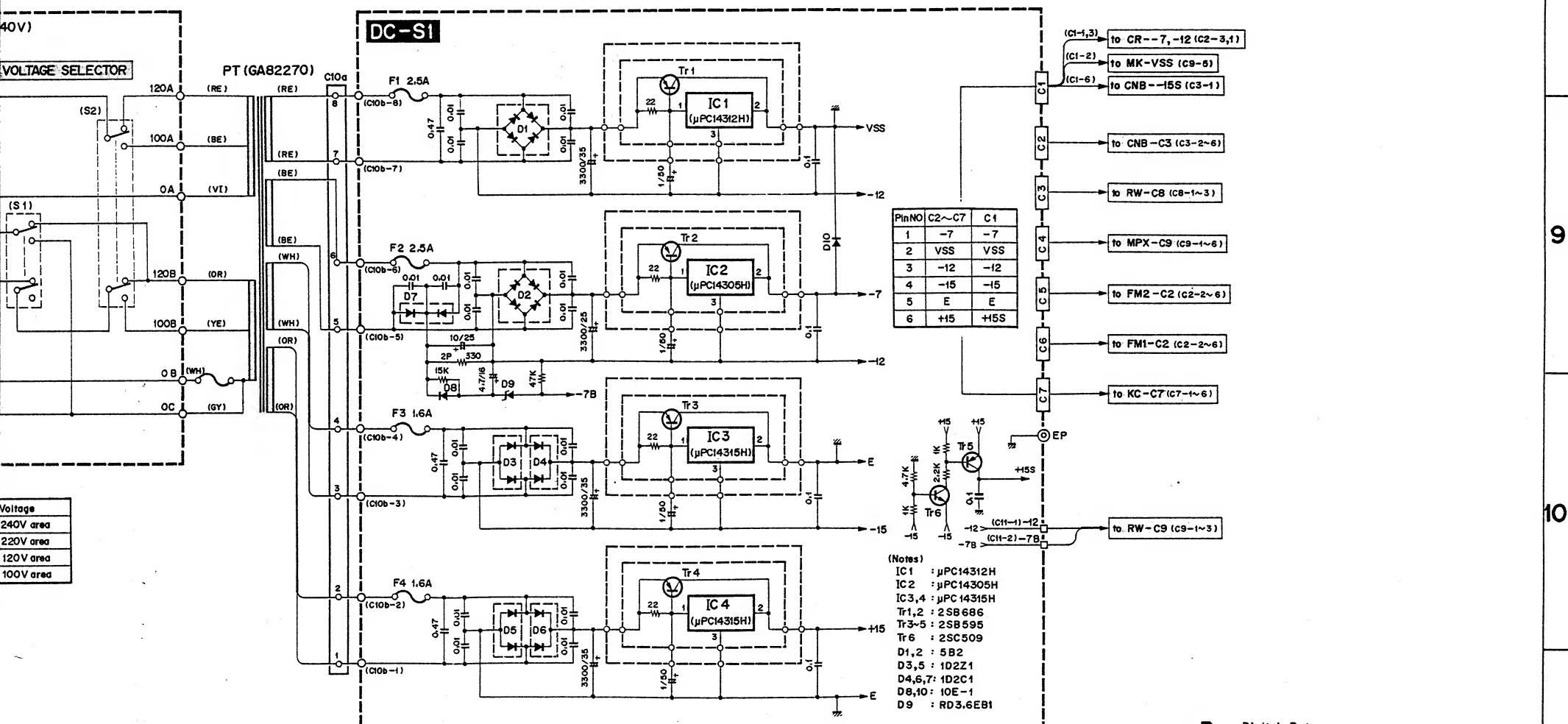
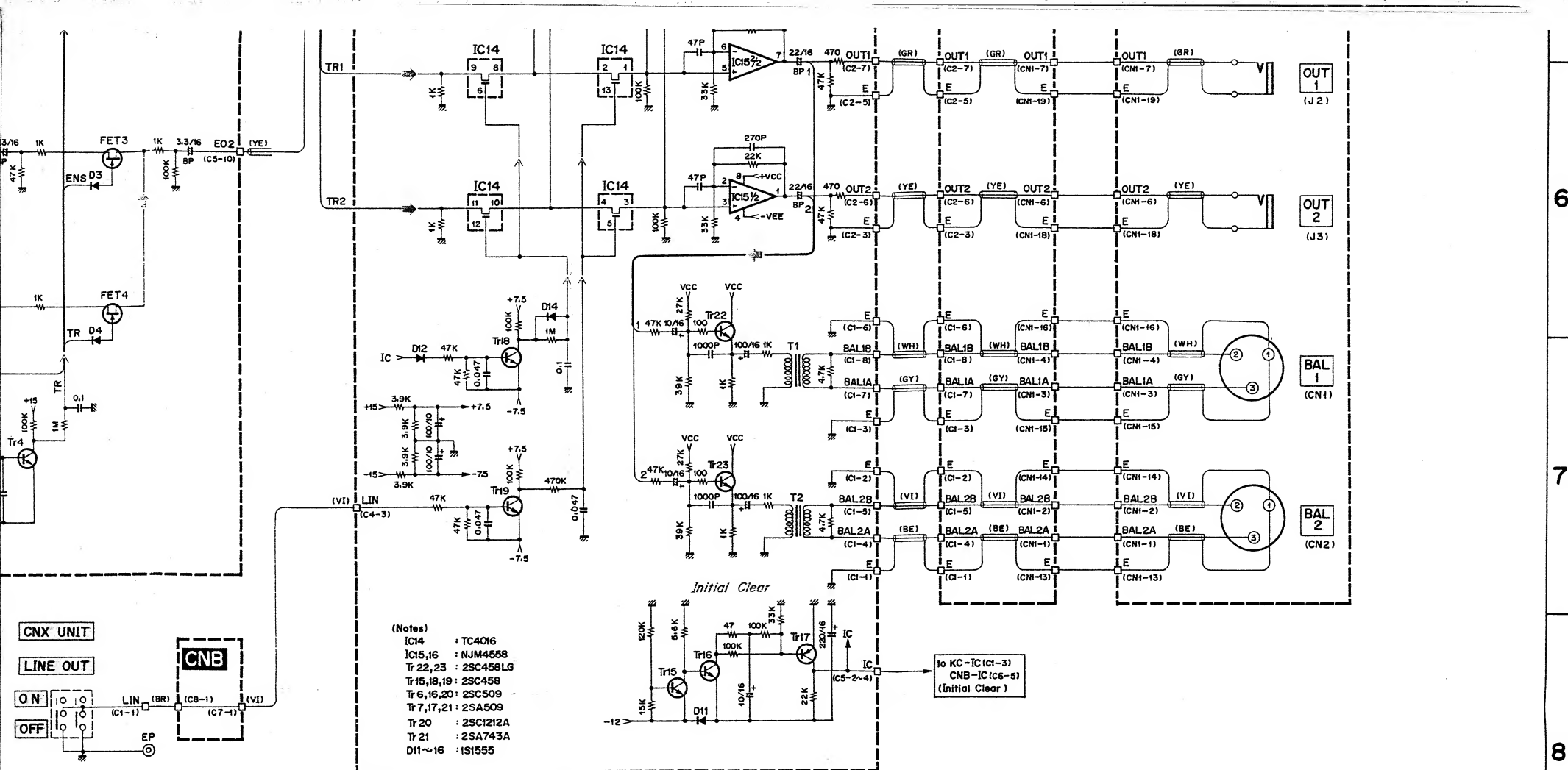
CR

Pin No.	Pin Name	Wire Color	Destination
1	REV	RE	RW-REV
2	-	-	-
3	WEN	GR	RW-WEN
4	WDT	BE	RW-WDT
5	WPR	YE	RW-WPR
6	MSW	OR	RW-MSW
7	CLD	VI	RW-CLD
8	MON	GY	RW-MON
9	RCK	WH	RW-RCK
10	RDT	GG	RW-RDT
11	+5V	GR	RW-5V
12	GND	BE	RW-GND

Pin No.	Pin Name	Wire Color	Destination
1	MG	BE	DC-1
2	MG	-	-
3	MSV	GR	DC-7

CN

Pin No.	Pin Name	Wire Color	Destination
1	-	-	-



CR

C1

Pin No.	Pin Name	Wire Color	Destination
1	REV	RE	RW-REV (C7-2)
2	—	—	—
3	WEN	GR	RW-WEN (C7-5)
4	WDT	BE	RW-WDT (C7-6)
5	WPR	YE	RW-WPR (C7-4)
6	MSW	OR	RW-MSW (C7-3)
7	CLD	VI	RW-CLD (C7-7)
8	MON	GY	RW-MON (C7-8)
9	RCK	WH	RW-RCK (C7-9)
10	RDT	GG	RW-RDK (C7-10)
11	+5V	GR	RW-7 (C7-11)
12	GND	BE	RW-12 (C7-12)

C2

Pin No.	Pin Name	Wire Color	Destination
1	MG	BE	DC-12 (C1-3)
2	MG	—	—
3	MSV	GR	DC-7 (C1-1)

CN

C1

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—

CNB

C4

Pin No.	Pin Name	Wire Color	Destination
1	IC	GY	PCA-IC (C3-6)
2	-15	—	—
3	-15	BR	PCA-15 (C2-1)
4	E	—	—
5	E	BL	PCA-E (C2-3)
6	15S	—	—
7	15S	RE	PCA+15 (C2-5)

C5

Pin No.	Pin Name	Wire Color	Destination
1	DAMP	WH	CNP-DAMP (C3-1)
2	TRM	GY	CNP-TREM (C3-2)
3	V1B	GG	CNP-V1B (C3-3)
4	E	BL	CNP-E (C3-4)
5	E	BL	CNP-E (C3-5)

C6

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	TET-12 (C1-2)
2	-12	—	—
3	Vss	BL	TET-Vss (C1-1)
4	Vss	—	—
5	IC	GY	A-IC (C5-3)
6	DAMP	WH	KC-DAMP (C3-9)
7	TRM	GR	A-TRMPD (C6-7)
8	V1B	GG	A-V1B (C3-2)

C7

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—

C9

Pin No.	Pin Name	Wire Color	Destination
1	G	BR	CNX-G (C3-1)
2	-15	—	—
3	G	OR	CNX-G (C3-3)
4	READY	YE	CNS-READY (C3-4)
5	CMD1	GR	CNX-CMD1 (C3-5)
6	G	BE	CNX-G (C3-6)
7	G	VI	CNX-G (C3-7)
8	CTRL1	GY	CNX-CTRL1 (C3-8)
9	D1A	WH	CNX-D1A (C3-9)
10	D2A	GG	CNX-D2A (C3-10)
11	D3A	SB	CNX-D3A (C3-11)
12	D4A	PK	CNX-D4A (C3-12)

C10

Pin No.	Pin Name	Wire Color	Destination
1	ϕ A	BR	CNX- ϕ A (C4-1)
2	ϕ B	RE	CNX- ϕ B (C4-2)
3	BUSY	OR	CNX-BUSY (C4-3)
4	CMD0	YE	CNX-CMD0 (C4-4)
5	CMD2	GR	CNX-CMD2 (C4-5)
6	COMR	BE	CNX-COMR (C4-6)
7	CTRL0	VI	CNX-CTRL0 (C4-7)
8	EXT	GY	CNX-EXT (C4-8)
9	D2M	WH	CNX-D2M (C4-9)
10	D3M	GG	CNX-D3M (C4-10)
11	D4M	SB	CNX-D4M (C4-11)
12	G	PK	CNX-G (C4-12)

DC

C1

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	CR-MSV (C2-3)
2	Vss	BL	MK1-Vss (C9-5)
3	-12	BE	CR-MG (C2-1)
4	-15	—	—
5	E	—	—
6	+15S	RE	CNB+15S (C3-1)

C2

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	LED-3
2	Vss	BL	CNB-Vss (C3-2)
3	-12	BE	CNB-12 (C3-3)
4	-15	BR	CNB-15 (C3-4)
5	E	BL	CNB-E (C3-5)
6	+15	OR	CNB+15 (C3-6)

C3

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	RW-7 (C8-1)
2	Vss	BL	RW-Vss (C8-2)
3	-12	BE	RW-12 (C8-3)
4	-15	—	—
5	E	—	—
6	+15	—	—

C4

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	MPX-7 (C9-1)
2	Vss	BL	MPX-Vss (C9-2)
3	-12	RE	MPX-12 (C9-3)

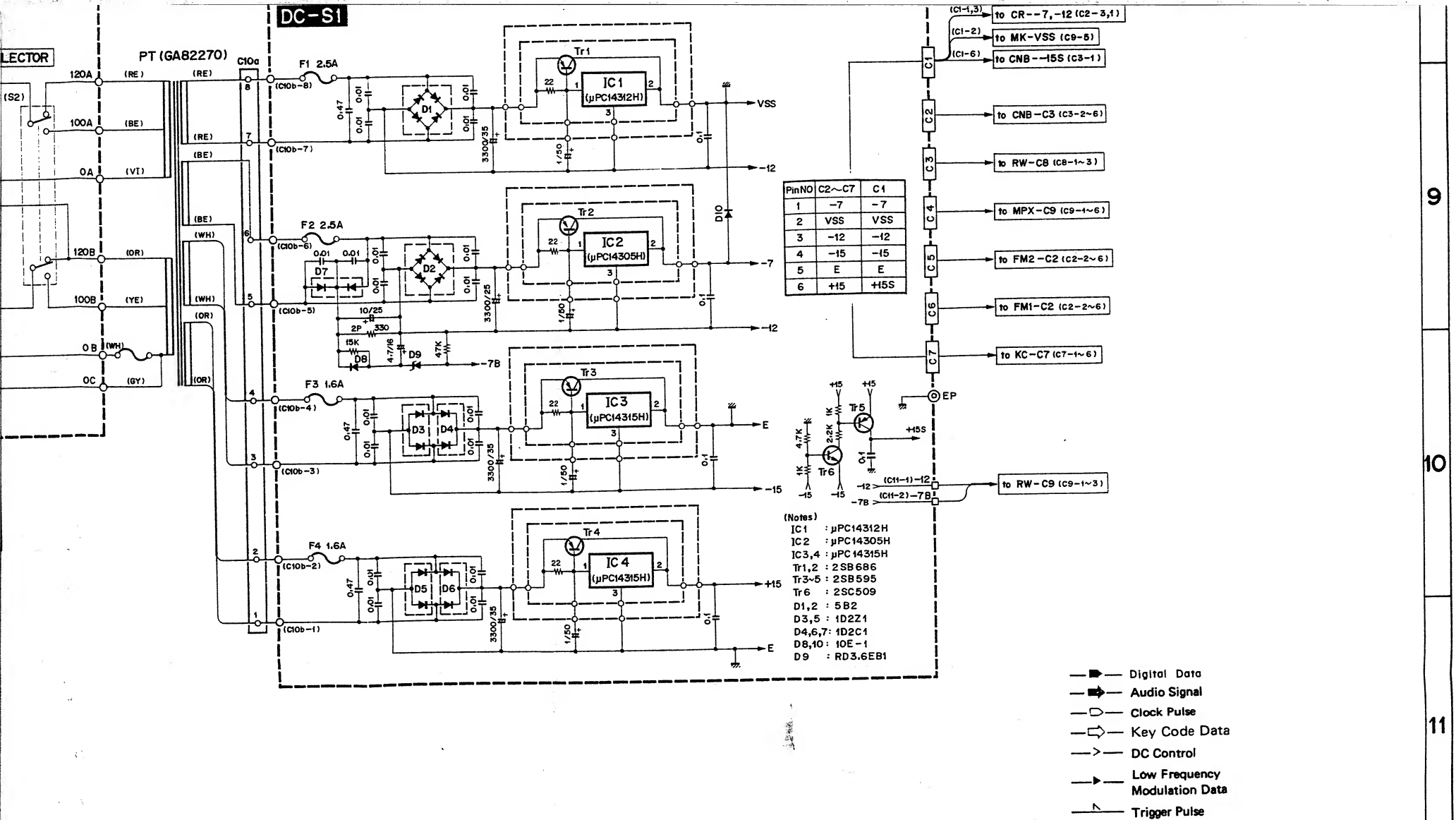
C8

Pin No.	Pin Name	Wire Color	Destination
1	PSW1	BR	PSW-1
2	PSW2	BR	PSW-2

- NOTES:**
- All Resistors are 1/4 watt unless otherwise specified.
 - All Capacitors are in microfarads unless otherwise specified.
 - All Keyswitches, Tabswitches and Pushbutton Switches shown in "off" position.
 - Capacitors
 - Δ mark : Tantalum Capacitor
 - \circ mark : Polystyrene Capacitor
 - K mark : Ceramic Capacitor 1000pF
 - ABBREVIATIONS OF WIRE COLOR IN ELECTONE

BL BLACK	RE RED
YE YELLOW	BE BLUE
GY GRAY	GG GRASS GREEN
PK PINK	OR ORANGE
BR BROWN	VI VIOLET
GR GREEN	SB SKY BLUE
WH WHITE	TP TIN PLATED WIRE
TR TRANSPARENT	
SOR Shielding orange wire	
SGRS Earthing conductor of shielding green wire	

RW				MK1				MK2				PCA1				PCA3			
C1				C8				C1				C1				C1			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	SELL-S1 (C1-8)			1	L1	S VI	KC-L1 (C4-7)	1	Vss	—	—	1	C #	RE	MPX-C-3 (C4-12)	1	C #	RE	MPX-C-3 (C4-12)
2	SELL-L1 (C1-7)			2	Vss	S VI S		2	L3	S GR	KC-L3 (C4-5)	2	D	OR	MPX-D1 (C2-11)	2	D	OR	MPX-D1 (C2-11)
3	SELL-S2 (C1-6)			3	Vss	S GR S		3	Vss	S GR S		3	D #	YE	MPX-D #1 (C2-10)	3	D #	YE	MPX-D #1 (C2-10)
4	SELL-L2 (C1-5)			4	LO	S GY	KC-LO (C4-8)	4	L2	S BE	KC-L2 (C4-6)	4	E	GR	MPX-E1 (C2-9)	4	E	GR	MPX-E1 (C2-9)
5	SELL-S3 (C1-4)			5				5	Vss	S BE S		5	F	BE	MPX-F1 (C2-8)	5	F	BE	MPX-F1 (C2-8)
6	SELL-L3 (C1-3)											6	F #	VI	MPX-F #1 (C2-7)	6	F #	VI	MPX-F #1 (C2-7)
7	SELL-S4 (C1-2)											7	G	GY	MPX-G1 (C2-6)	7	G	GY	MPX-G1 (C2-6)
8	SELL-L4 (C1-1)																		
9	CNB-WRITE (C7-6)																		
10	CNB-—12 (C7-7)																		
C2				C2				C2				C2				C2			
Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination	Pin No.	Pin Name	Wire Color	Destination
1	—12	BE	DC-—12 (C11-1)	1	D #1	S BE	KC-D #1 (C5-6)	1	C1	BR	MK2-C1 (C3-1)	1	—15	BR	CNB-—15 (C4-3)	1	—15	BR	PCA2-—15 (C2-2)
2	PON	PK	DC-PON (C11-2)	2	Vss	S BE S		2	C2	RE	MK2-C2 (C3-2)	2	—15	BR	PCA2-—15 (C2-1)	2	—15	BR	PCA2-—15 (C2-1)
3	—7B	VI	DC-—7B (C11-3)	3	Vss	S GR S		3	B1	OR	MK2-B1 (C3-3)	3	E	BL	CNB-E (C4-5)	3	E	BL	PCA2-E (C2-4)
				4	D #2	S GR	KC-D #2 (C5-5)	4	B2	YE	MK2-B2 (C3-4)	4	E	BL	PCA2-E (C2-3)	4	E	BL	PCA2-E (C2-3)
				5	D1	S YE	KC-D1 (C5-4)	5	A #1	GR	MK2-A #1 (C3-5)	5	+15	RE	CNB-15S (C4-7)	5	+15	OR	PCA2-+5 (C2-6)
				6	Vss	S YES		6	A #2	BE	MK2-A #2 (C3-6)	6	+15	RE	PCA2-+15 (C2-5)	6	+15	OR	PCA2-+15 (C2-5)
				7	Vss	S OR S		7	A1	VI	MK2-A1 (C3-7)								
				8	D2	S OR	KC-D2 (C5-3)	8	A2	GY	MK2-A2 (C3-8)								
				9	C #1	S RE	KC-C #1 (C5-2)	9	G #1	WH	MK2-G #1 (C3-9)								
				10	Vss	S RES		10	G #2	GG	MK2-G #2 (C3-10)								
				11	Vss	S BR S		11	G1	SB	MK2-G1 (C3-11)								
				12	C #2	S BR	KC-C #2 (C5-1)	12	G2	PK	MK2-G2 (C3-12)								
C3				C3				C3				C3				C3			



CR

Wire Color	Destination
RE	RW-REV (C7-2)
GR	RW-WEN (C7-5)
BE	RW-WDT (C7-6)
YE	RW-WPR (C7-4)
OR	RW-MSW (C7-3)
VI	RW-CLD (C7-7)
GY	RW-MON (C7-8)
WH	RW-RCK (C7-9)
GG	RW-RDK (C7-10)
GR	RW-—7 (C7-11)
BE	RW-—12 (C7-12)

Wire Color	Destination
BE	DC-—12 (C1-3)
GR	DC-—7 (C1-1)

CN

Wire Color	Destination
BR	EQ-—15 (C2-3)
BL	EQ-E (C2-1)
OR	EQ-+15 (C2-4)

Wire Color	Destination
BE	A-—12 (C10-1)
BR	A-—15 (C10-2)
BL	A-E (C10-6)
OR	A-+15 (C10-7)

Wire Color	Destination
RE	DC-+15S (C1-6)
BL	DC-Vss (C2-2)
BE	DC-—12 (C2-3)
BR	DC-—15 (C2-4)
BL	DC-E (C2-5)
OR	EC-+15 (C2-6)

CNB

Pin No.	Pin Name	Wire Color	Destination
1	IC	GY	PCA-IC (C3-6)
2	-15	—	—
3	-15	BR	PCA-—15 (C2-1)
4	E	—	—
5	E	BL	PCA-E (C2-3)
6	15S	—	—
7	15S	RE	PCA-+15 (C2-5)

Pin No.	Pin Name	Wire Color	Destination
1	DAMP	WH	CNP-DAMP (C3-1)
2	TRM	GY	CNP-TREM (C3-2)
3	V1B	GG	CNP-V1B (C3-3)
4	E	BL	CNP-E (C3-4)
5	E	BL	CNP-E (C3-5)

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	TET-—12 (C1-2)
2	-12	—	—
3	Vss	BL	TET-Vss (C1-1)
4	Vss	—	—
5	IC	GY	A-IC (C5-3)
6	DAMP	WH	KC-DAMP (C3-9)
7	TRM	GR	A-TRMPD (C6-7)
8	V1B	GG	A-V1B (C9-2)

Pin No.	Pin Name	Wire Color	Destination
1	LIN	VI	A-LIN (C4-3)
2	EXP	BE	A-EXP (C4-1)
3	PC1	YE	A-PC1 (C7-4)
4	PC2	OR	A-PC2 (C7-3)
5	PC3	GR	A-PC3 (C7-1)
6	WRITE	WH	RW-WRITE (C1-9)
7	-12	BE	RW-—12 (C1-10)
8	PLK	SB	RW-PLK (C3-9)
9	S1	BB	RW-S1 (C3-10)
10	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	LIN	BR	CNX-LIN (C1-1)
2	EXP	RE	CNX-EXP (C1-2)
3	PC1	OR	CNX-PC1 (C1-3)
4	PC2	YE	CNX-PC2 (C1-4)
5	PC3	GR	CNX-PC3 (C1-5)
6	WRITE	BE	CNX-WRITE (C1-6)
7	-12	BE	CNX-—12 (C1-7)
8	PLK	SB	CNX-PLK (C1-8)
9	S1	—	—
10	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	G	BR	CNX-G (C3-1)
2	G	RE	CNX-G (C3-2)
3	G	OR	CNX-G (C3-3)
4	READY	YE	CNS-READY (C3-4)
5	CMD1	GR	CNX-CMD1 (C3-5)
6	G	BE	CNX-G (C3-6)
7	G	VI	CNX-G (C3-7)
8	CTRL1	GY	CNX-CTRL1 (C3-8)
9	D1A	WH	CNX-D1A (C3-9)
10	D2A	GG	CNX-D2A (C3-10)
11	D3A	SB	CNX-D3A (C3-11)
12	D4A	PK	CNX-D4A (C3-12)

Pin No.	Pin Name	Wire Color	Destination
1	φA	BR	CNX-φA (C4-1)
2	φB	RE	CNX-φB (C4-2)
3	BUSY	OR	CNX-BUSY (C4-3)
4	CMD0	YE	CNX-CMD0 (C4-4)
5	CMD2	GR	CNX-CMD2 (C4-5)
6	COMR	BE	CNX-COMR (C4-6)
7	CTRL0	VI	CNX-CTRL0 (C4-7)
8	EXT	GY	CNX-EXT (C4-8)
9	D2M	WH	CNX-D2M (C4-9)
10	D3M	GG	CNX-D3M (C4-10)
11	D4M	SB	CNX-D4M (C4-11)
12	G	PK	CNX-G (C4-12)

BB

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	DC-—12 (C12-1)
2	—	—	—
3	-7B	VI	DC-—7B (C12-3)

DC

Pin No.	Pin Name	Wire Color	Destination
1	G	BR	CR-M5V (C2-3)
2	Vss	BL	MK1-Vss (C9-5)
3	-12	BE	CR-MG (C2-1)
4	-15	—	—
5	E	—	—
6	+15S	RE	CNB-+15S (C3-1)

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	LED-3
2	Vss	BL	CNB-Vss (C3-2)
3	-12	BE	CNB-—12 (C3-3)
4	-15	BR	CNB-—15 (C3-4)
5	E	BL	CNB-E (C3-5)
6	+15	OR	CNB-+15 (C3-6)

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	RW-—7 (C8-1)
2	Vss	BL	RW-Vss (C8-2)
3	-12	BE	RW-—12 (C8-3)
4	-15	—	—
5	E	—	—
6	+15	—	—

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	MPX-—7 (C9-1)
2	Vss	BL	MPX-Vss (C9-2)
3	-12	BE	MPX-—12 (C9-3)
4	-15	BR	MPX-—15 (C9-4)
5	E	BL	MPX-E (C9-5)
6	+15	OR	MPX-+15 (C9-6)

Pin No.	Pin Name	Wire Color	Destination
1	-7	—	—
2	Vss	BL	FM2-Vss (C2-2)
3	-12	BE	FM2-—12 (C2-3)
4	-15	BR	FM2-—15 (C2-4)
5	E	BL	FM2-E (C2-5)
6	+15	OR	FM2-+15 (C2-6)

Pin No.	Pin Name	Wire Color	Destination
1	-7	—	—
2	Vss	BL	FM-Vss (C2-2)
3	-12	BE	FM1-—12 (C2-3)
4	-15	BR	FM1-—15 (C2-4)
5	E	BL	FM1-E (C2-5)
6	+15	OR	FM1-+15 (C2-6)

Pin No.	Pin Name	Wire Color	Destination
1	-7	GR	KC-—7 (C7-1)
2	Vss	BL	KC-Vss (C7-2)
3	-12	BE	KC-—12 (C7-3)
4	-15	—	—
5	E	BL	KC-E (C7-5)
6	+15	OR	KC-+15 (C7-6)

NOTES:

- All Resistors are 1/4 watt unless otherwise specified.
- All Capacitors are in microfarads unless otherwise specified.
- All Keyswitches, Tabswitches and Pushbutton Switches shown in "off" position.
- Capacitors
 - Δ mark : Tantalum Capacitor
 - mark : Polystyrene Capacitor
 - K mark : Ceramic Capacitor 1000pF
- ABBREVIATIONS OF WIRE COLOR IN ELECTONE

BL BLACK	RE RED
YE YELLOW	BE BLUE
GY GRAY	GG GRASS GREEN
PK PINK	OR ORANGE
BR BROWN	VI VIOLET
GR GREEN	SB SKY BLUE
WH WHITE	TP TIN PLATED WIRE
TR TRANSPARENT	
SOR Shielding orange wire	
SGRS Earthing conductor of shielding green wire	

Pin No.	Pin Name	Wire Color	Destination
1	PSW1	BR	PSW-1
2	PSW2	BR	PSW-2

Pin No.	Pin Name	Wire Color	Destination
1	AC1	SB	CNP-AC1 (C2-1)
2	—	—	—
3	AC2	BR	CNP-AC2 (C2-3)

Pin No.	Pin Name	Wire Color	Destination
1	—	—	—
2	—	—	—
3	—	—	—
4	—	—	—
5	—	—	—
6	—	—	—
7	—	—	—
8	—	—	—
9	—	—	—
10	—	—	—

Pin No.	Pin Name	Wire Color	Destination
1	-12	BE	RW-—12 (C9-1)
2	PON	PK	RW-PON (C9-2)
3	-7B	VI	RW-—7B (C9-3)

YAMAHA

GS2

PARTS LIST

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A. Electronic Components (電気部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
	NA:80:69:20	Circuit Board FM #8605	F M シ ー ト		GS1	
	NA:80:69:30	- do. - KC #8606	K C シ ー ト		GS1	
	NA:80:69:60	- do. - A #8609	A シ ー ト		GS1	
※	NA:80:73:80	- do. - MK3 #8639	M K 3 シ ー ト			
※	NA:80:74:10	- do. - MK4 #8610	M K 4 シ ー ト			
※	NA:80:74:01	- do. - PN-EFF #8637	P N - E F F シ ー ト			
※	NA:80:74:02	- do. - PN-SEL-L #8637	P N - S E L - L シ ー ト			
※	NA:80:74:03	- do. - PN-SEL-R #8637	P N - S E L - R シ ー ト			
※	NA:80:74:04	- do. - PN-EQ #8637	P N - E Q シ ー ト			
※	NA:80:74:05	- do. - PN-STO #8637	P N - S T O シ ー ト			
※	NA:80:74:20	- do. - RW #8608	R W シ ー ト			
※	NA:80:73:90	- do. - DC #8638	D C シ ー ト			J
※	NA:80:74:60	- do. - #8638	"			U,C
※	NA:80:74:70	- do. - #8638	"			G
※	NA:80:83:50	- do. - AC #8626	A C シ ー ト			J
※	NA:80:83:60	- do. - #8626	"			U,C
※	NA:80:83:70	- do. - #8626	"			G
	i G:00:11:80	IC TC4013BP	I C	D Flip-Flop		
	i G:00:12:40	- do. - TC4011BP	"	2-input NAND		
	i G:00:12:50	- do. - TC4027BP	"	J-K Flip-Flop		
	i G:00:13:90	- do. - NJM4558DV	"	OP. Amp		
	i G:00:16:00	- do. - BA634	"	Divider		
	i G:00:16:90	- do. - TC4016BP	"	Bilateral SW		
	i G:00:17:20	- do. - TC4069UBP	"	Inverter		
	i G:00:17:70	- do. - TC4051BP	"	8ch Multiplexer		
	i G:00:18:40	- do. - HD7400	"	2-input NANDx4		
	i G:02:60:00	- do. - #02600	"	VCA		
	i G:02:65:00	- do. - HD7416P	"	Inverter		
	i G:02:68:10	- do. - HD74LS20P	"	4-input NANDx2		
	i G:02:69:10	- do. - HD74LS00P	"	2-input NANDx4		
	i G:02:70:00	- do. - HD7404P	"	Inverter		
	i G:02:70:10	- do. - HD74LS04P	"	Inverter		
	i G:02:87:00	- do. - μPC14315P	"	+15V Regulator		
	i G:03:29:00	- do. - iG03290	"	BBD Driver		
	i G:03:32:00	- do. - μPC14312H	"	+12V Regulator		
	i G:03:33:00	- do. - μPC14305H	"	+5V - do. -		
	i G:03:35:00	- do. - μPC610D	"	10 bit D/A Convertor		
	i G:03:55:00	- do. - TC4028BP	"	Decoder		
	i G:03:81:00	- do. - TC4024BP	"	Counter		
	i G:04:35:00	- do. - TC40161BP	"	Programmable 4 bit counter		
	i G:04:37:00	- do. - HD74LS08P	"	AND		
	i G:04:38:00	- do. - HD7417P	"	Buffer		
	i G:04:40:00	- do. - HD74LS74AP	"	D Flip-Flop		
	i G:04:42:00	- do. - HD74LS138P	"	Decoder/Demultiplexer		
	i G:04:43:00	- do. - HD74145P	"	BCD to Decimal Decoder		
	i G:04:44:00	- do. - HD74LS161P	"	Synchronous 4 bit Counter		
	i G:04:45:00	- do. - HD74LS240P	"	Buffer x 8		
	i G:04:46:00	- do. - SN74LS245	"	Octal Bus Transceivers		
	i G:04:47:00	- do. - SN74LS273	"	Octal D Flip-Flop		
	i G:04:48:00	- do. - SN75366N	"	NAND(TTL to MOS)		
	i G:04:49:00	- do. - μPD8035	"	CPU		
	i G:04:50:00	- do. - μPD8243	"	I/O EXP		

※ New Parts (新規部品) (J: Japan, U: US.American, C: Canadian, G: General)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
	i G:04:52:00	IC TC5516P	I C	2KX8 bit RAM		
	i G:04:53:00	- do. - TC4009UBP	//	Inverter		
	i G:04:61:00	- do. - MN3009	//	256 Stage BBD		
	i G:04:80:00	- do. - HD74LS366	//	Bus Driver		
	i G:05:28:00	- do. - TC40H032P	//	2-input OR x 4		
	i T:31:10:00	- do. - YM311	//	KC		
	i T:31:20:00	- do. - YM312	//	CP		
	i T:31:60:00	- do. - YM316	//	ACC		
	i T:32:00:00	- do. - YM320	//	IG		
	i T:32:10:00	- do. - YM321	//	EG		
	i T:32:20:00	- do. - YM322	//	EC		
	i T:32:70:00	- do. - YM327	//	ADD		
	i T:34:40:00	- do. - YM344	//	PG		
	i T:34:50:10	- do. - YM34501	//	OPC		
	i T:34:50:20	- do. - YM34502	//	OPM		
	i T:34:70:00	- do. - YM347	//	VRG		
	i T:63:30:00	- do. - YM633	//	SEC II		
	i N:00:33:00	- do. - MB8516	//	EP ROM iG04510		
	i A:05:09:10	Transistor 2SA509(Y)	ト ラ ン ジ ス タ			
	i A:07:43:00	- do. - 2SA743A(B)	//			
	i A:10:15:70	- do. - 2SA1015(O,Y)	//			
	i C:04:58:30	- do. - 2SC458(C)	//			
	i C:04:58:80	- do. - 2SC458(B,C)	//			
	i C:04:58:90	- do. - 2SC458LG(C,D)	//			
	i C:04:59:00	- do. - 2SC458(C,D)	//			
	i C:05:09:20	- do. - 2SC509(Y)	//			
	i C:07:52:30	- do. - 2SC752(O,Y)	//			
	i C:12:12:00	- do. - 2SC1212A(C)	//			
	i C:19:59:30	- do. - 2SC1959 (O,Y)	//			
	i E:10:12:00	FET 2SK105F	F E T			
	i F:00:00:10	Diode 1N34A	ダ イ オ ー ド			
	i F:00:00:40	- do. - 1S1555	//			
	i F:00:00:70	- do. - 1S2473VE	//			
	i F:00:08:80	- do. - Zener WZ-050	ツェナーダイオード			
	i F:00:16:60	- do. - RZ3.6EB1	//			
	i H:00:01:10	- do. - 5B-2	ダ イ オ ー ド			
	i H:00:02:80	- do. - 1D2C1	//			
	i H:00:02:90	- do. - 1D2Z1	//			
	i H:00:05:90	- do. - 10E-1	//			
	i K:00:02:90	Photo-Coupler P873-13	フ ォ ト カ プ ラ ー			
	FC:08:54:70	Metalized Myler Cap. 0.47 μ F/100V	M M コ ン デ ン サ			
	FD:15:21:80	Polystyrene Cap 180PF	ス チ コ ン			
	FD:15:22:70	- do. - 270PF	//			
	FD:15:23:30	- do. - 330PF	//			
	FM:09:62:20	Bipolar Electrolytic Cap. 2.2 μ F/16V	バ イ ボ ー ラ ケ ミ コ ン			
	FM:09:63:30	- do. - 3.3 μ F/16V	//			

※ New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
	FM:09:64:70	Bipolar Electrolytic Cap. 4.7 μ F/16V	バイポーラケミコン			
	FM:09:71:00	— do. — 10 μ F/16V	"			
	FM:09:72:20	— do. — 22 μ F/16V	"			
	FM:22:61:00	— do. — 1 μ F/25V	"			
	FZ:00:22:50	Spark Suppressor Cap. 0.022 μ F	スパークキラー			
	FZ:00:23:90	Electrolytic Cap. 3300 μ F/25V	ケミコン			
	FZ:00:24:00	— do. — 3300 μ F/35V	"			
	HL:31:54:70	Metal Oxide Film Resistor 470 Ω 1W	酸金抵抗			
	HV:55:42:20	Flame Proof Carbon Resistor 22 Ω	不燃化カーボン抵抗			
	HV:55:44:70	— do. — 47 Ω	"			
	HV:55:51:00	— do. — 100 Ω	"			
	HZ:00:16:70	Module Resistor 4.7K Ω x8	モジュール抵抗			
	HZ:00:16:80	— do. — 4.7K Ω x12	"			
	HZ:00:16:90	— do. — 10K Ω x12	"			
	HZ:00:17:00	— do. — 27K Ω x12	"			
	HZ:00:17:10	— do. — 100K Ω x10	"			
	HZ:00:17:20	— do. — 470K Ω x12	"			
	HZ:00:17:30	Metal Film Resistor 1K Ω \pm 0.1%	金皮抵抗			
	HZ:00:17:40	— do. — 2K Ω \pm 0.1%	"			
	HS:31:05:50	Variable Resistor A10K Ω	可変抵抗器	Vib. Depth, Tre. Depth		
※	HS:31:11:60	— do. — B5K Ω	"	Tune		
※	HS:31:12:40	— do. — G50K Ω x2	"	Treb. Mid. Bass		
※	HS:31:12:50	— do. — A50K Ω x2	"	Vol.		
※	HS:31:13:30	— do. — C100K Ω	"	Vib. Speed		
※	HS:31:14:00	— do. — C250K Ω	"	Tre. Speed		
	HT:19:00:50	Variable Resistor B10K Ω	半固定抵抗			
	HT:19:00:60	— do. — B20K Ω	"			
	HT:19:00:70	— do. — B50K Ω	"			
	HT:19:01:30	— do. — B2K Ω	"			
	LB:30:01:60	Cannon Socket XLR3-32	キャノンソケット			
	LB:20:18:20	AC Inlet 2P	2Pインレット			JUC
	LB:30:07:30	Base Pin 3P	2.5ピッチベースピン	Top Entry		
	LB:50:02:50	— do. — 5P	"	— do. —		
	LB:60:24:60	— do. — 7P	"	— do. —		
	LB:60:24:90	— do. — 8P	"	— do. —		
	LB:60:24:70	— do. — 10P	"	— do. —		
	LB:60:31:30	— do. — 12P	"	— do. —		
	LB:50:02:70	— do. — 5P	"	Side Entry		
	LB:60:37:00	— do. — 6P	"	— do. —		
	LB:50:03:70	— do. — 5P	"	Bottom Entry		
	LB:60:30:60	— do. — 8P	"	— do. —		
	LB:60:30:70	— do. — 10P	"	— do. —		
	LB:30:07:20	Housing 3P	2.5ピッチハウジング			
	LB:50:02:40	— do. — 5P	"			
	LB:60:36:80	— do. — 6P	"			
	LB:60:24:40	— do. — 7P	"			
	LB:60:24:80	— do. — 8P	"			

※ New Parts (新規部品)

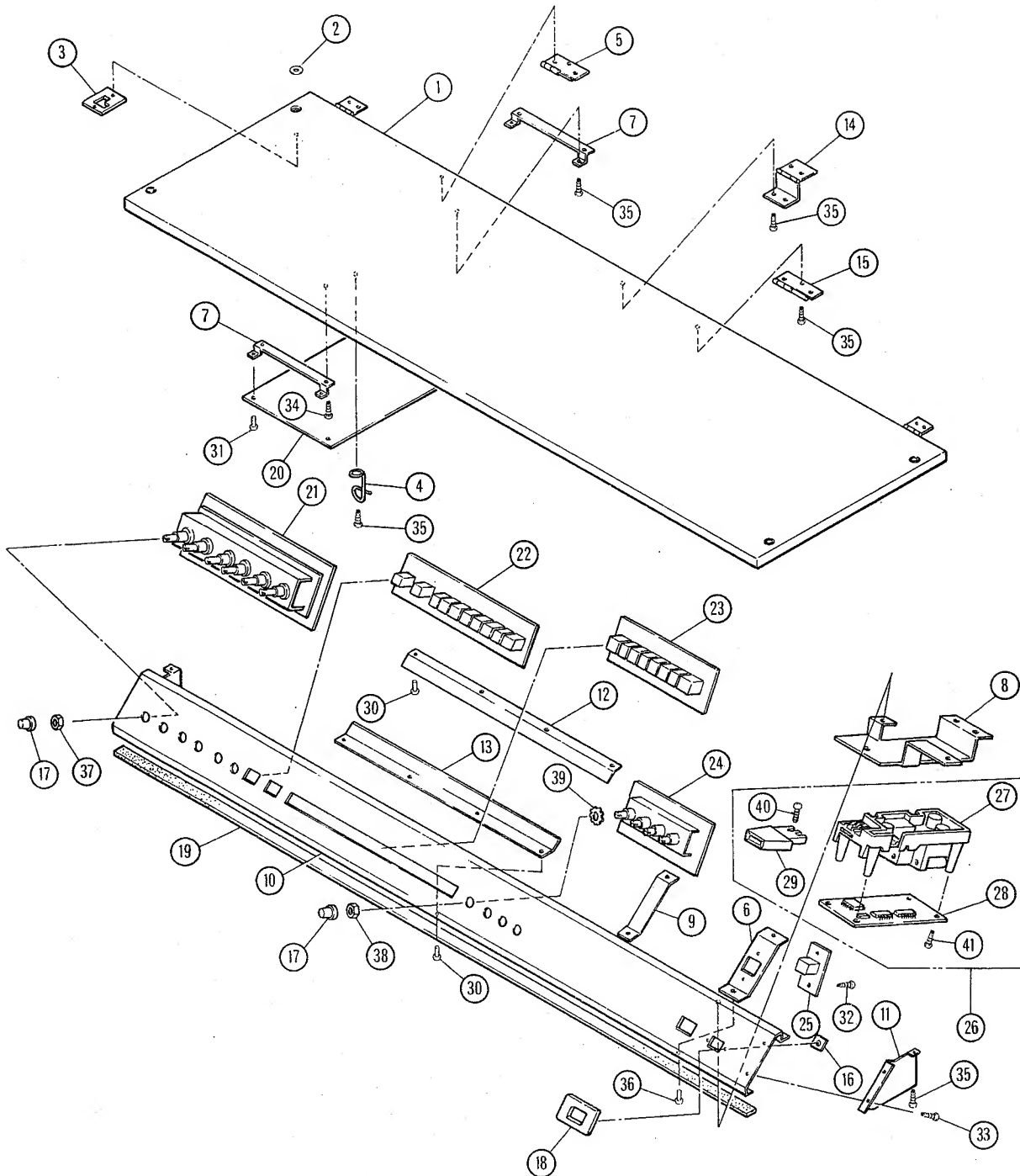
Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
	LB:60:24:50	Housing 10P	2.5ピッチハウジング			
	LB:60:29:20	— do. — 12P	〃			
	LB:60:24:20	Header 20P	ヘ ッ ダ ー			
	LB:60:35:50	— do. — 26P	〃			
	LB:60:24:30	— do. — 30P	〃			
	LB:60:39:00	IC Socket 24P	I C ソ ケ ッ ト			
	LB:60:39:10	— do. — 40P	〃			
	LB:20:15:30	Fuse Holder Pin	ヒューズホルダーピン			
	LB:20:05:70	— do. —	〃			
	LB:20:11:20	Jack	ジ ャ ッ ク			
	LB:20:15:40	— do. —	〃			
	LB:20:18:60	AC Inlet	A C イ ン レ ッ ト			G
	LB:40:08:20	Housing 4P(Plug)	ハ ウ ジ ン グ			
	LB:40:08:30	— do. — 4P	〃			
※	LB:40:08:80	Connector	コ ネ ク タ ー			
	LB:60:15:50	Connector Cap 9P	9 P キ ャ ッ プ			
	LB:60:16:70	Pin Contact	ピンコンタクト			
	LB:60:37:50	Housing 8P(Plug)	ハ ウ ジ ン グ			
	LB:60:37:70	— do. — 8P	〃			
※	LB:60:38:80	Plug 4P	4 P ブ ラ グ			
	LB:60:39:70	Connector 6P	コ ネ ク タ ー			
	LB:60:39:90	— do. — 8P	〃			
	LB:60:40:20	Housing 6P	ハ ウ ジ ン グ			
	LB:60:40:40	— do. — 8P	〃			
	BB:00:44:30	Contact	2.5ピッチコンタクトピン			
	BB:00:44:90	— do. —	コンタクトピン メス	Female		
	BB:00:46:90	— do. —	コンタクトピン オス	Male		
	BB:00:49:90	— do. —	〃			
	KB:00:06:90	Fuse (Miniature) T2.5A 250V	ミニチュアヒューズ			G
	KB:00:07:40	— do. — — do. — T1.6A — do. —	〃			G
	KB:00:23:50	— do. — — do. — 1.6A — do. —	〃			J
	KB:00:23:70	— do. — — do. — 2.5A — do. —	〃			J
	KB:00:25:00	— do. — — do. — 1.6A 125V	〃			U,C
	KB:00:25:20	— do. — — do. — 2.5A — do. —	〃			U,C
	NB:81:60:60	Card Reader Unit	カードリーダーユニット			
	NB:81:61:50	Key Switch Unit I	スイッチユニット I	6		
	NB:81:61:60	— do. — II	〃 II	4		
	NB:03:70:40	Tablet Switch	タブレットスイッチ	Pedal		
※	NB:81:71:40	Power Supply Unit	電 源 ユ ニ ッ ト			J
※	NB:81:72:90	— do. —	〃			U,C
※	NB:81:73:00	— do. —	〃			G
※	NB:81:74:10	Power Transformer Unit	電源トランスユニット			
	MG:00:10:30	AC Cord	電 源 コ ー ド			J
	MG:00:10:40	— do. —	〃			U
	MG:00:10:50	— do. —	〃			G
	MG:00:11:20	— do. —	〃			C
	MZ:80:85:50	Flat Cable Assy FM 30P	F M 線 材 キ ッ ト			
	MZ:80:85:80	— do. — TD 20P	T D 〃			

※ New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
MZ:80:93:20	Flat Cable Ass'y	26P	T D 線 材 キ ャ ブ ル			
KA:40:05:00	Slide Switch		ス ラ イ ド ス イ ッ チ	Line Out		
KA:40:07:00	- do. -		"	PGM Lock		
KA:40:08:30	Voltage Selector		電 圧 切 替 器			
KA:10:10:60	See-Saw Switch		電 源 ス イ ッ チ	Power		
KA:50:14:30	Rotary Switch	3-3	ロ ー タ リ ー ス イ ッ チ	Detune		
KA:90:17:00	Push Switch	GY	プ シ ュ ス イ ッ チ	Tremolo, Ensemble, Store	SK20	
KA:90:17:10	- do. -	WH	"	Tone Sel.		
GD:90:02:50	Line Transformer		ラ イ ン ト ラ ンス			
GE:30:03:50	Choke Coil	68μH	チ ョ ー ク コ イ ル			
GE:90:05:00	Coil	CK4	コ イ ル			U,C
GE:90:05:30	Coil	CK6	"			U,C
QU:00:10:00	Ceramic Vibrator	6.00MHz	セ ラ ミ ッ ク 発 振 子			
CB:07:28:80	Insulation Bushing		絶 縁 ブ ッ シュ			
i L:00:05:80	Mica Base		マ イ カ ベ ース			
NB:81:60:60	Card Reader Unit		カ ー ド リ ー ダ ー ユ ニ ッ ト			
NX:80:01:10	Mech. Unit, Card Reader	K90-0799	メ カ ユ ニ ッ ト			
NX:80:01:20	Circuit Board, - do. -	K90-0711	C/R シ ー ト			
i X:00:01:10	IC	TDA1041-RP12	I C	E60-0039		
i X:00:01:20	- do. -	EHMD226W34	"	E60-0040		
i X:00:01:30	- do. -	M5923	"	E60-1092		
i G:05:26:00	- do. -	HD74LS05P	"	E60-1140		
i A:05:64:90	Transistor	2SA564(S)	ト ラ ン ジ ス ト	E65-6054		
i X:00:01:40	- do. -	2SA683-R	"	E65-6089		
i X:00:01:50	Diode	1S1558	ダ イ オ ード	E65-5001		
i H:00:00:30	- do. -	10D1	"	E65-5002		
KX:00:00:20	Relay	RZ-5	リ レ ー	E62-1105		
HX:00:00:10	Variable Resistor	B1.5KΩ	半 固 定 抵 抗	E62-9540		

※ New Parts (新規部品)

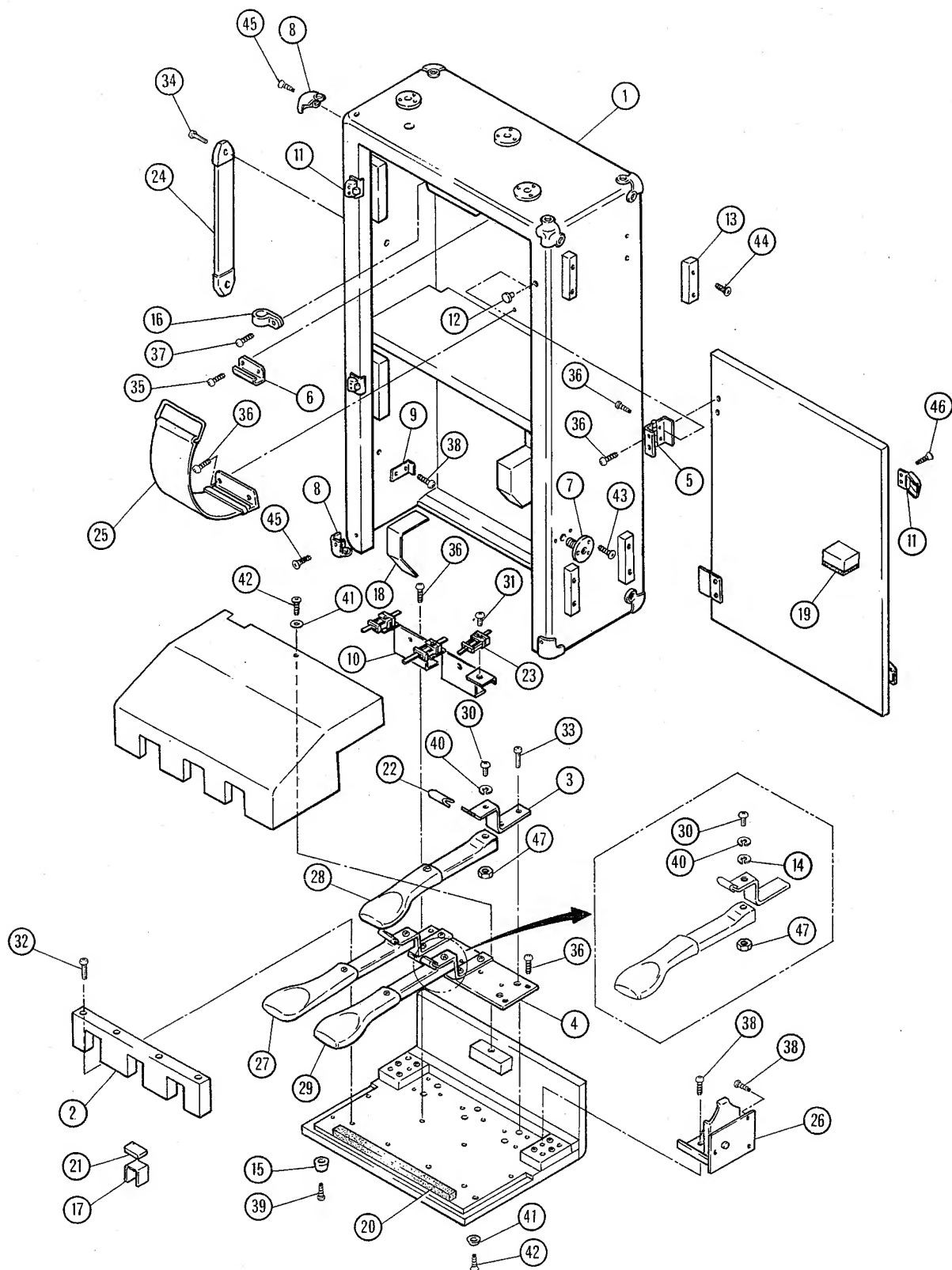
B. Control Panel Assembly (コントロールパネル)



[illegible]

※ New Parts (新規部品)

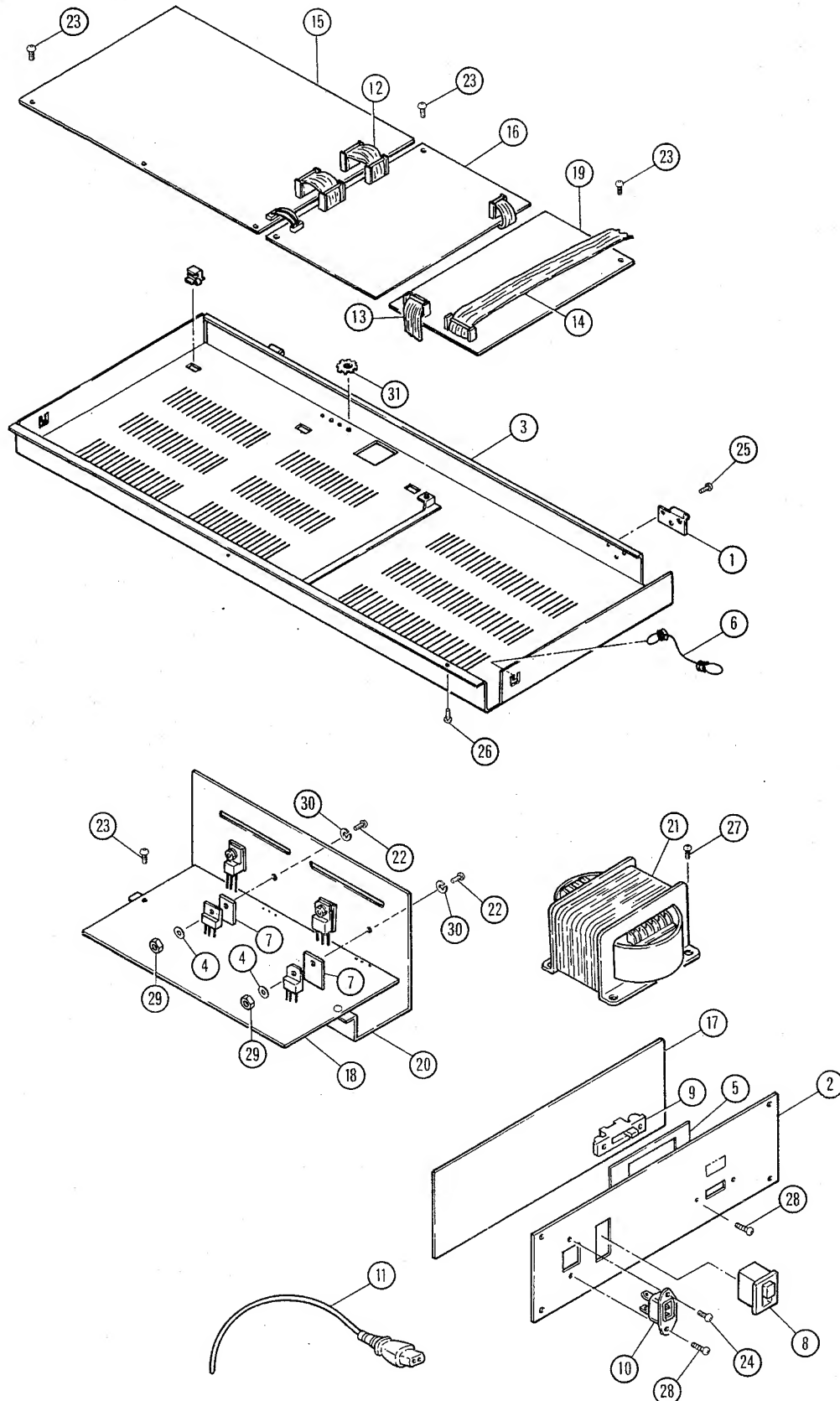
C. Pedal Assembly (ペダルAss'y)



[illegible]

※ New Parts (新規部品)

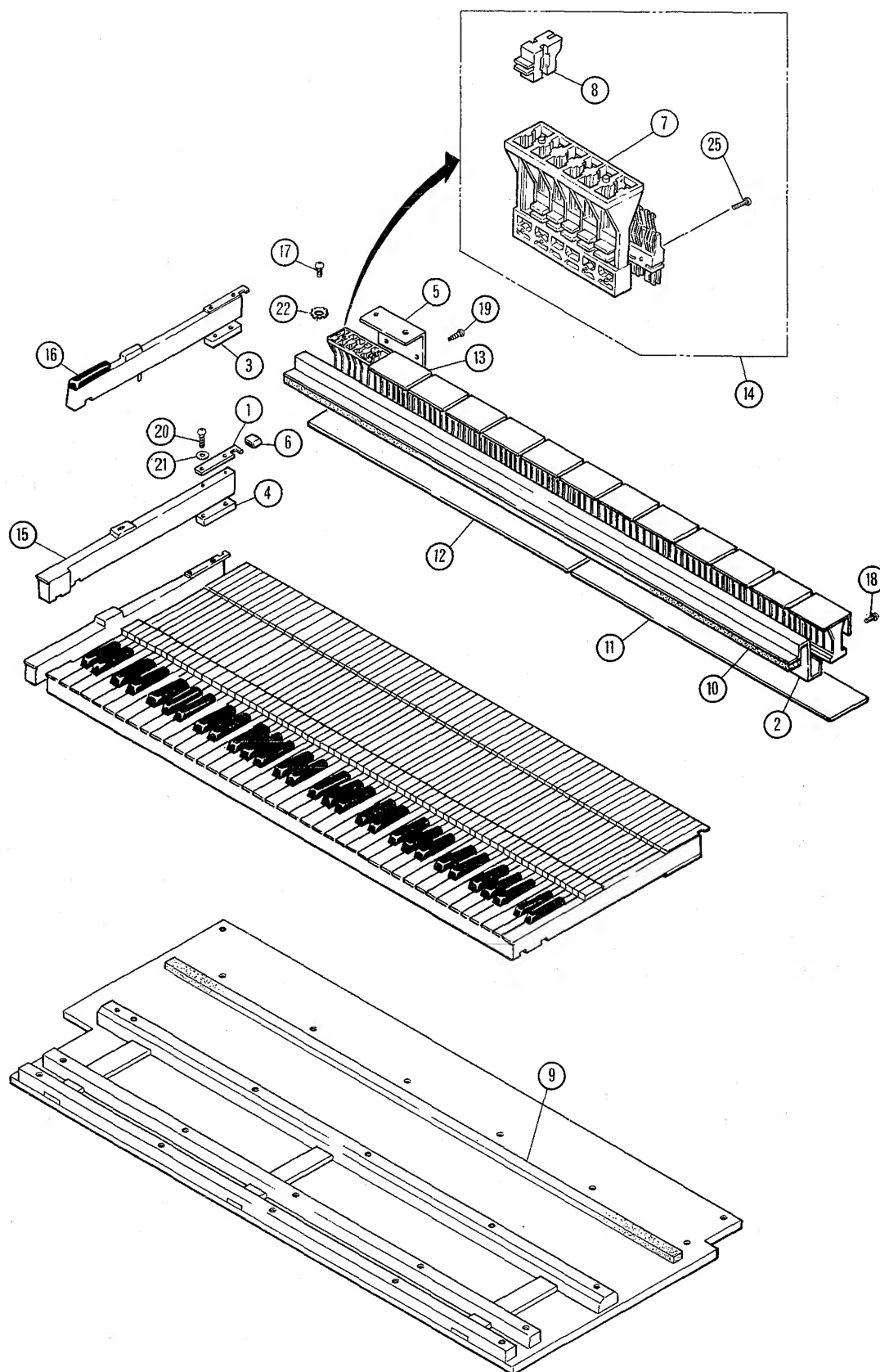
D. D Rack & Power Supply Unit (Dラック及び電源ユニット)



[illegible]

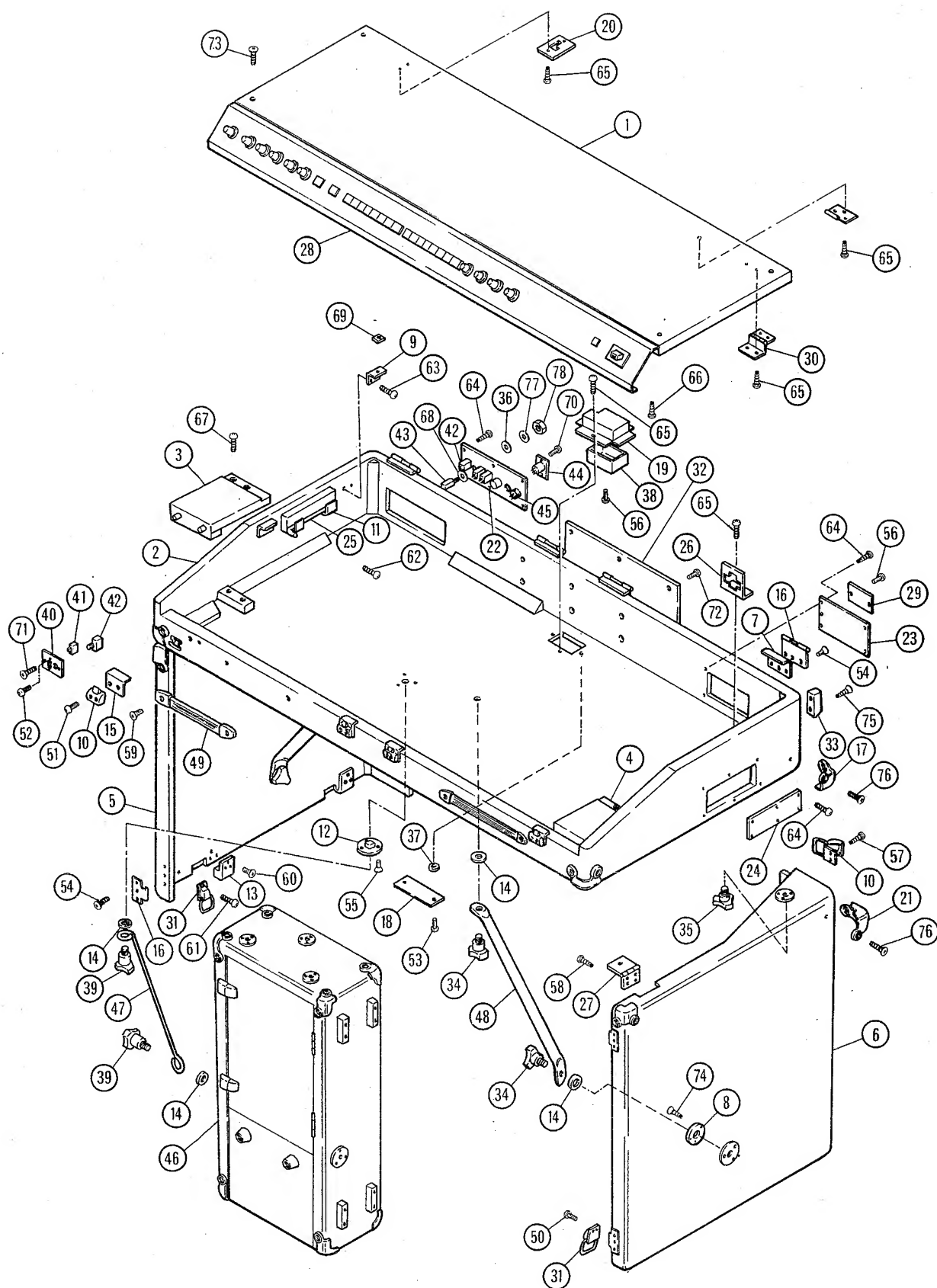
※ New Parts (新規部品)

E. Keyboard Assembly (鍵盤)



※ New Parts (新規部品)

F. Cabinet (外装)



Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
※ 1	DA:80:59:90	Top Board Ass'y	屋 根 集 成			
※ 2	DA:80:60:00	Bottom Case Ass'y	底 枠 集 成			
※ 3	DA:80:60:10	End Block Ass'y (L)	拍 子 木 集 成 (左)			
※ 4	DA:80:60:20	— do. — (R)	〃 (右)			
※ 5	DA:80:60:30	Cover Leg Ass'y (L)	蓋 脚 集 成 (左)			
※ 6	DA:80:60:40	— do. — (R)	〃 (右)			
7	AA:01:46:90	Corner Angle	コーナアングル			
8	AA:01:58:70	Stay Washer	脚 受 座 金			
9	AA:04:60:80	Top Board Holder	受 け 金 具			
10	AA:80:24:50	Lock	バ ッ チ ン 錠			
11	AA:80:25:40	Stay Stopper	ス テ ー 押 え 金 具			
12	AA:80:42:70	Nut, Leg	脚 用 ナ ッ ト			
13	AA:80:42:90	Slip Fitting	滑 り 座			
14	AA:80:46:30	Knob Bolt Ring	脚 柱 リ ン グ			
15	AA:80:58:10	Corner Angle	コーナアングル			
16	AA:80:64:20	Latch Hinge	引 掛 蝶 番			
17	AA:80:90:50	Corner Metal	コ ー ナ ー 金 具			
18	AA:81:12:60	Cover	蓋		GS1	J
	AA:81:26:00	— do. —	〃		GS1	U, C, G
19	AA:81:14:00	Battery Cover	バッテリカバー		GS1	
20	AA:81:46:00	Stay Holder	ス テ ー 受 け 金 具		GS1	
21	AA:81:47:70	Corner Metal	コ ー ナ ー 金 具			
※ 22	AA:81:61:40	I/O Panel	I/O パネル			
※ 23	AA:81:61:50	PGM Panel	P G M パネル			
※ 24	AA:81:61:70	Power Supply Panel	電 源 パネル			J
※	AA:81:61:80	— do. —	〃			G
※	AA:81:74:50	— do. —	〃			U, C
※ 25	AA:81:62:90	Top Board Stay	屋 根 ス テ ー			
※ 26	AA:81:63:00	Connector Holder	コネクターホルダー			
※ 27	AA:81:66:30	Leg Hinge	脚 蝶 番			
※ 28	AA:81:66:40	Control Panel	コントロールパネル			
※ 29	AA:81:67:30	Connector Cover	コネクターカバー			
※ 30	AA:81:73:80	Hinge, Top Board	蝶 番			
31	AA:99:00:00	Lock	バ ッ チ ン 錠			
32	BA:50:00:60	Name Plate	ネームプレート		CP-70B CP-80	
33	CB:01:03:10	Case Leg	脚			
34	CB:80:83:30	Knob Bolt	ノ ブ ネ ジ			
35	CB:80:83:40	— do. — M8 x 30	〃			
36	CB:81:00:90	Insulation Nut	絶 縁 ナ ッ ト			
37	CB:81:29:20	Stopper	グリップ型止め輪			
38	CB:81:42:40	Battery Case	電 池 ケ ー ス		GS1	
※ 39	CB:81:81:30	Knob Bolt	ノ ブ ネ ジ			
※ 40	CB:81:81:40	Phones Panel	ホ ー ン パネル			
41	KA:40:05:00	Slide Switch	スライドスイッチ	Line Out		
42	LB:20:11:20	Jack	ジ ャ ッ ク	Phones, Foot Cont.		
43	LB:20:15:40	— do. —	〃	Output		
44	LB:30:01:60	Cannon Socket XLR3-32	キャノンソケット			
※ 45	LB:40:08:80	Connector 4P	4 P コネクター	Pedal		
※ 46	NB:81:69:40	Pedal Unit	ペダル組立			
※ 47	NB:81:69:70	Pedal Stay Ass'y (L)	ペダルステーAss'y(左)			
※	NB:81:69:80	— do. — (R)	〃 (右)			
※ 48	NB:81:69:90	Stay Ass'y	脚 柱 Ass'y			
※ 49	NB:81:75:10	Handle Ass'y	取 手 Ass'y			

※ New Parts (新規部品)

[illegible]

※ New Parts (新規部品)